February 18, 2021

Ms. Cheryl A. Tubbs
Lilburn Corporation
1905 Business Center Drive
San Bernardino, CA 92408

SUBJECT: US COLD STORAGE TRAFFIC ASSESSMENT

Dear Ms. Cheryl A. Tubbs:

This Traffic Assessment letter has been prepared for the US Cold Storage development (**Project**), which is located on the southeast corner of US Highway 395 and Avenal Street in the City of Hesperia. Specifically, this traffic assessment summarizes the findings of an iterative analysis that has been prepared to determine the maximum square footage that could be developed prior to requiring the implementation of the 3 off-site intersection improvement construct obligations.

SUMMARY OF FINDINGS

The purpose of this traffic assessment was to determine the maximum square footage that could be developed before triggering the three off-site improvements as identified in the US Cold Storage Traffic Analysis (prepared by Urban Crossroads, Inc., dated January 19, 2021, referred to as **Traffic Study**). Specifically, construct obligations were identified at the following intersections for the Project which included both the northern and southern buildings (1,046,768 square feet of high-cube cold storage warehouse use):

- US Highway 395 at Avenal Street – Install a traffic signal, construct a southbound left turn lane, and construct westbound shared left-right turn lane.
- US Highway 395 at Yucca Terrace Drive – Install a traffic signal, construct a southbound left turn lane, construct westbound left turn lane, and westbound shared through right-turn lane.
- US Highway 395 at Phelan Road/Main Street – Add a 2nd northbound left turn lane and 2nd southbound left turn lane.

The northern building has been evaluated in the following phases for the purposes of this assessment:

- Phase 1 = 185,600 square feet of high-cube cold storage warehouse use
- Phase 2 = an additional 50,000 square feet for a total of 235,600 square feet of high-cube cold storage warehouse use
- Phase 3 = and additional 100,000 square feet for a total of 335,600 square feet of high-cube cold storage use
- Phase 4 (Buildout) = 515,334 square feet of high-cube cold storage warehouse use

Based on the iterative analysis it was determined that each of the off-site improvements were triggered as noted below:

- US Highway 395 at Avenal Street – 185,600 square feet (Phase 1) of the northern building could be developed before necessitating the signalization of this intersection in conjunction with the southbound left turn lane.
- US Highway 395 at Yucca Terrace Drive – The northern building is anticipated to take all ingress and egress access via Avenal Street to US Highway 395. The northern building would only contribute northbound and southbound through traffic to this intersection. It is anticipated that a traffic signal and additional turn lanes needed to serve a future cumulative project on the southwest corner of US Highway 395 and Yucca Terrace Drive would be needed under cumulative traffic conditions. There is an existing deficiency at this intersection but is associated with existing traffic and not the result of Project traffic. As such, the Project should contribute its fairshare towards improvements needed at this intersection to maintain acceptable levels of service(LOS) during the peak hours.
- US Highway 395 at Phelan Road/Main Street – The buildout of the northern building (515,334 square feet of high-cube cold storage warehouse use) would require the construction of a 2nd southbound left turn lane. Note that the 2nd northbound left turn lane is not needed under Existing plus Project (E+P) traffic conditions with the development of only the northern building.

Horizon Year (2040) With Project traffic conditions have also been evaluated to determine the fair share contribution associated with the northern building only. In addition to the changes to the construct obligations, the fair share contribution for Building 1 is $107,405 as compared to the $156,515 identified in the Traffic Study.

PROJECT TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition, 2017) was used to estimate the trip generation. Trip generation rates used for the purposes of this traffic assessment are consistent with those used in the Traffic Study and are summarized on Table 1.

TABLE 1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates:									
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2-Axle Trucks			0.008	0.002	0.010	0.003	0.007	0.010	0.257
3-Axle Trucks			0.003	0.001	0.003	0.001	0.002	0.003	0.082
4+-Axle Trucks			0.012	0.004	0.016	0.004	0.011	0.015	0.403
PCE Trip Generation Rates:[5]									
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2- Axle Trucks (PCE = 1.5)			0.012	0.004	0.015	0.004	0.010	0.014	0.386
3- Axle Trucks (PCE = 2.0)			0.005	0.002	0.007	0.002	0.004	0.006	0.163
4+-Axle Trucks (PCE = 3.0)			0.037	0.011	0.048	0.012	0.033	0.045	1.209

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

[2] TSF = thousand square feet

[3] Vehicle Mix Source: ITE Trip Generation Handbook Supplement (2020), Appendix C.
Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

[4] PCE rates are per SBCTA: 2-Axle = 1.5, 3-Axle = 2.0, 4+-Axle = 3.0.

As part of the iterative analysis conducted for this assessment, the square footage for the northern building was divided into different phases to identify the maximum square footage that could be developed before triggering off-site improvements. Based on the iterative assessment, the development of the northern building was divided into the following 4 phases:

- Phase 1 = 185,600 square feet of high-cube cold storage warehouse use
- Phase 2 = an additional 50,000 square feet for a total of 235,600 square feet of high-cube cold storage warehouse use
- Phase 3 = and additional 100,000 square feet for a total of 335,600 square feet of high-cube cold storage use
- Phase 4 (Buildout) = 515,334 square feet of high-cube cold storage warehouse use

The trip generation summary showing daily and peak hour trip generation estimates for the proposed Project is shown on Table 2. As shown on Table 2, the Project is anticipated to generate a net total of 1,094 two-way trips per day with 56 AM peak hour trips and 62 PM peak hour trips at buildout. Detailed trip generation tables for each phase are provided in Attachment A.

TABLE 2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Trip Generation Summary (Actual):								
Phase 1	185.600 TSF	14	4	18	6	16	22	396
Phase 2	235.600 TSF	21	6	27	8	22	30	504
Phase 3	335.600 TSF	29	8	37	10	30	40	712
Phase 4 (Project Buildout)	515.334 TSF	43	13	56	16	46	62	1,094
Project Trip Generation Summary (PCE):								
Phase 1	185.600 TSF	21	6	27	8	22	30	582
Phase 2	235.600 TSF	28	8	36	10	27	37	742
Phase 3	335.600 TSF	40	12	52	14	39	53	1,054
Phase 4 (Project Buildout)	515.334 TSF	60	19	79	22	59	81	1,618

[1] TSF = thousand square feet

PROJECT TRIP DISTRIBUTION

The distribution patterns from the Traffic Study have been utilized for the purposes of this traffic assessment with the exception that all access is to occur off of Avenal Street (no access on Yucca Terrace Drive).

TRAFFIC SIGNAL WARRANT ANALYSIS

Peak hour volume-based and planning level (average daily traffic/ADT) traffic signal warrants have been conducted for the intersection of US Highway 395 at Avenal Street for all phase and also for Horizon Year (2040) traffic conditions. The intersection of US Highway 395 at Avenal Street is not anticipated to warrant a traffic signal; however, high delays are anticipated for side-street traffic (on Avenal Street) starting with the 2nd phase of Building 1 without the installation of a traffic signal. A traffic signal warrant has not been run for the purposes of this assessment at US Highway 395 at Yucca Terrace Drive as this location is anticipated to warrant a traffic signal under Opening Year Cumulative traffic conditions (as disclosed in the Traffic Study). Similar to Avenal Street, Yucca Terrace Drive is currently operating at a deficient LOS due to high delays experienced by side-street traffic (no delays to US Highway 395 traffic). These high delays are anticipated to continue until a traffic signal is installed at this intersection. Traffic signal warrant analysis worksheets are included in Attachment B for each appliable phase.

E+P OPERATIONS ANALYSIS

Existing plus Project (E+P) traffic operations have been assessed for the 3 intersections with construct obligations to determine the maximum square footage that could be developed before triggering the off-site improvement needs. Table 3 summarizes the LOS results for each of the E+P phases.

TABLE 3: INTERSECTION ANALYSIS FOR E+P CONDITIONS

	US 395 & Avenal St.				US 395 & Yucca Terrace Dr.				US 395 & Main St.			
	Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
Analysis Scenario	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
Existing (2020) Conditions	Future Intersection				24.0	**124.8**	C	**F**	27.3	50.8	C	D
E+P (Phase 1) - 185.6 TSF	26.5	34.2	D	D	24.2	**133.1**	C	**F**	27.5	53.6	C	D
E+P (Phase 2) - 235.6 TSF	26.8	**36.0**	D	**E**	24.3	**133.1**	C	**F**	27.6	53.9	C	D
E+P (Phase 3) - 335.6 TSF	28.1	**39.4**	D	**E**	24.4	**137.7**	C	**F**	27.7	54.9	C	D
E+P (Phase 4) - 515.334 TSF	30.1	**48.2**	D	**E**	24.6	**148.0**	C	**F**	27.9	**56.7**	C	**E**

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

As shown in Table 3, the intersection of US Highway 395 and Avenal Street is anticipated to operate at an acceptable LOS as a cross-street stop-controlled intersection under the first phase (185,600 square feet). However, improvements are needed starting with the 2nd phase. Operations at US Highway 395 and Yucca Terrace Drive is consistent with Existing conditions. The northern building is proposed to take all access off of Avenal Street (no access off of Yucca Terrace Drive), as such, would only be contributing northbound and southbound through traffic. For this reason, the improvement needs at US Highway 395 and Yucca Terrace Drive are identified as cumulative needs (as opposed to direct construct obligations for the Project). A deficiency is not anticipated at US Highway 395 and Phelan Road/Main Street until Project Buildout (515,334 square feet). As such, improvements would need to be in place byProject buildout. Analysis worksheets for E+P conditions are included in Attachment C through Attachment F.

HORIZON YEAR (2040) OPERATIONS ANALYSIS

Horizon Year (2040) With Project traffic conditions has also been evaluated for the 3 locations to verify future improvement needs and fair share contribution associated with the development of Building 1 only. Table 4 summarizes the LOS results for Horizon Year (2040) With Project traffic conditions, which are consistent with the Traffic Study. Analysis worksheets for Horizon Year (2040) conditions are included in Attachment G.

TABLE 4: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS

#	Intersection	Traffic Control[2]	2040 Without Project Delay[1] (secs.) AM	PM	2040 Without Project Level of Service AM	PM	2040 With Project Delay[1] (secs.) AM	PM	2040 With Project Level of Service AM	PM	Acceptable LOS
1	US Highway 395 & Avenal St.	**TS**[3]	Future Intersection				**>200.0**	**>200.0**	**F**	**F**	D
2	US Highway 395 & Yucca Terrace Dr.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	D
3	US Highway 395 & Phelan Rd./Main St.	TS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	D

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

[3] The Project will construct a traffic signal as part of the Project design features.

INTERSECTION IMPROVEMENTS

Based on the iterative analysis it was determined that each of the off-site improvements were triggered as noted below:

- US Highway 395 at Avenal Street – 185,600 square feet (Phase 1) of the northern building could be developed before necessitating the signalization of this intersection in conjunction with the southbound left turn lane. The improvements will need to be in place prior to Phase 2.
- US Highway 395 at Yucca Terrace Drive – The northern building is anticipated to take all ingress and egress access via Avenal Street to US Highway 395. The northern building would only contribute northbound and southbound through traffic to this intersection. It is anticipated that a traffic signal and additional turn lanes needed to serve a future cumulative project on the southwest corner of US Highway 395 and Yucca Terrace Drive would be needed under cumulative traffic conditions. There is an existing deficiency at this intersection but is associated with existing traffic and not the result of Project traffic. As such, the Project should contribute its fairshare towards improvements needed at this intersection to maintain acceptable levels of service(LOS) during the peak hours.
- US Highway 395 at Phelan Road/Main Street – The buildout of the northern building (515,334 square feet) would require the construction of a 2nd southbound left turn lane. Note that the 2nd northbound left turn lane is not needed under E+P traffic conditions with the development of only the northern building.

Intersection improvement operations analysis are shown on Table 5 for E+P conditions.

TABLE 5: INTERSECTION ANALYSIS FOR E+P CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	US Highway 395 & Avenal St.																	
	E+P (Phase 1)		Not Applicable															
	E+P (Phase 2)	**TS**	0	1	0	**1**	1	0	0	0	0	0	**1**	0	7.7	37.4	A	D
	E+P (Phase 2) - Alternative	CSS	0	**2**	0	**1**	**2**	0	0	0	0	0	**1**	0	20.0	34.3	C	D
	E+P (Phase 3)	**TS**	0	1	0	**1**	1	0	0	0	0	0	**1**	0	8.5	44.5	A	D
	E+P (Phase 4)	**TS**	0	1	0	**1**	1	0	0	0	0	0	**1**	0	10.3	51.0	B	D
3	US Highway 395 & Phelan Rd./Main St.																	
	E+P (Phase 4)	TS	1	2	0	**2**	2	0	1	2	0	1	2	0	26.4	44.3	C	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-street Stop; TS = Traffic Signal; **TS** = Improvement

The improvements needed for acceptable LOS for Horizon Year (2040) With Project traffic conditions is shown on Table 6. Note that the improvements shown are consistent with the Traffic Study with the exception that an eastern leg has not been assumed for US Highway 395 at Yucca Terrace Drive as all Project access for the northern building is to occur off of Avenal Street.

TABLE 6: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	US Highway 395 & Avenal St. - With Project	**TS**	0	**3**	0	**1**	**3**	0	0	0	0	0	**1**	0	4.0	5.6	A	A
2	US Highway 395 & Yucca Terrace Dr. - With Project	**TS**	**1**	**3**	0	0	**3**	0	**1**	0	1	0	0	0	45.8	26.1	D	C
3	US Highway 395 & Phelan Rd./Main St. - With Project	TS	**2**	**3**	**1**	**2**	**3**	**1**	1	**3**	**1**	1	**3**	**1>**	50.6	52.4	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; **TS** = Improvement

Fair share percentages have been calculated for the 3 deficient study area intersections for Horizon Year (2040) traffic conditions for the northern building only (see Table 7). As shown on Table 7, the fair share percentage range from 1.55% to 3.26%.

TABLE 7: PROJECT FAIR SHARE CALCULATIONS

#	Intersection	Existing (2020)	Project (Bldg 1) Only	Horizon Year (2040) With Project	Net New Traffic	Project % of New Traffic[1]
1	US Highway 395 & Avenal St.					
	AM:	2,187	79	4,730	2,543	3.11%
	PM:	2,437	81	4,923	2,486	**3.26%**
2	US Highway 395 & Yucca Terrace Dr.					
	AM:	2,190	73	5,122	2,932	**2.49%**
	PM:	2,450	74	5,487	3,037	2.44%
3	US Highway 395 & Phelan Rd./Main St.					
	AM:	3,393	73	7,731	4,338	**1.68%**
	PM:	3,947	75	8,772	4,825	1.55%

BOLD = Denotes highest fair share percentage.

[1] Highest trip generation percentage is used to calculate rough order of magnitude costs on Table 8.

Improvement needs for the 3 deficient study area intersections are shown on Table 8 along with the applicable fair share percentages calculated previously in Table 7 and rough order of magnitude fair share cost estimates. In addition to the changes to the construct obligations identified through the E+P operations analyses, the fair share contribution for Building 1 has been calculated at $107,405 for all cumulative improvements as compared to the $156,515 identified in the Traffic Study.

If you have any questions, please contact me directly at (949) 861-0177.

Respectfully submitted,
URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE
Associate Principal

TABLE 8: SUMMARY OF IMPROVEMENTS BY ANALYSIS SCENARIO

#	Intersection Location	Jurisdiction	E+P (Phase 1)	E+P (Phase 2)	E+P (Phase 3)	E+P (Phase 4)	Horizon Year (2040) Without Project	Horizon Year (2040) With Project	Improvements in Fee Program?[1]	Project Responsibility[2]	Total Cost[3]	Fair Share %[4]	Fair Share Cost[5]
1	US Highway 395 & Avenal St.	Hesperia, Caltrans	None	Install a Traffic Signal	Same	Same	Not Applicable	Same	No	Construct[8]	$0	3.26%	$0
				Add SB left turn lane			Not Applicable	Same	No	Construct[8]	$0		$0
							Add 2nd NB through lane	Same	No	Fair Share	$282,240		$9,196
							Add 2nd SB through lane	Same	No	Fair Share	$282,240		$9,196
							Add 3rd NB through lane	Same	No	Fair Share	$282,240		$9,196
							Add 3rd SB through lane	Same	No	Fair Share	$282,240		$9,196
										Total	**$1,128,960**		**$36,784**
2	US Highway 395 & Yucca Terrace Dr.	Hesperia, Caltrans	None	None	None	None	Add 2nd NB through lane	Same	No	Fair Share	$282,240	2.49%	$7,027
							Add 2nd SB through lane	Same	No	Fair Share	$282,240		$7,027
							Add NB left turn lane	Same	No	Other[7]	$0		$0
							Install a Traffic Signal	Same	No	Fair Share	$600,000		$14,939
							Add EB left turn lane	Same	No	Other[7]	$0		$0
							Add EB right turn lane	Same	No	Other[7]	$0		$0
							Add 3rd NB through lane	Same	No	Fair Share	$282,240		$7,027
							Add 3rd SB through lane	Same	No	Fair Share	$282,240		$7,027
										Total	**$1,728,960**		**$43,047**
3	US Highway 395 & Phelan Rd./Main St.	Hesperia, Caltrans	None	None	None	Add 2nd SB left turn lane	Same	Same	No	Construct	$0	1.68%	$0
							Add 2nd NB left turn lane	Same	No	Fair Share	$78,400		$1,319
							Add 3rd EB through lane	Same	No	Fair Share	$282,240		$4,750
							Add 3rd WB through lane	Same	No	Fair Share	$282,240		$4,750
							Add WB right turn lane	Same	No	Fair Share	$78,400		$1,319
							Modify the traffic signal to implement overlap phasing for the WB right turn lane	Same	No	Fair Share	$117,600		$1,979
							Add 3rd NB through lane	Same	No	Fair Share	$282,240		$4,750
							Add NB right turn lane	Same	No	Fair Share	$78,400		$1,319
							Add 3rd SB through lane	Same	No	Fair Share	$282,240		$4,750
							Add SB right turn lane	Same	No	Fair Share	$78,400		$1,319
							Add EB right turn lane	Same	No	Fair Share	$78,400		$1,319
										Total	**$1,638,560**		**$27,574**
										Total Costs for Horizon Year (2040) Improvements	**$4,496,480**		**$107,405**
										Total Project Fair Share Contribution to the City of Hesperia (non-DIF)[6]	**$107,405**		

[1] Improvements included in City of Hesperia Development Impact Fee (DIF) or the San Bernardino County Transportation Authority (SBCTA) Congestion Management Program (CMP) fee programs.
[2] Identifies the Project's responsibility to construct an improvement, contribute fair share, or contribute a fee payment towards the implementation of the improvements shown.
[3] Costs have been estimated using the data provided in Appendix "G" of the CMP (2016 Update) for preliminary construction costs. A factor of 1.568 has been applied to adjust and reflect 2020 costs.
[4] Program improvements constructed by project may be eligible for fee credit, at discretion of the City. See Table 8-1 for Fair Share Calculations.
[5] Rough order of magnitude cost estimate.
[6] Total project fair share contribution consists of the improvements which are not already included in a fee program for those intersections wholly or partially within the City of Hesperia.
[7] Improvement to be constructed by others as needed to facilitate site access.
[8] Project will construct the improvement in order to facilitate site access or as a design feature.

ATTACHMENT A
TRIP GENERATION SUMMARY BY PHASE

TABLE A: PHASE 1 TRIP GENERATION SUMMARY

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Trip Generation Summary (Actual):								
High-Cube Cold Storage Warehouse	185.600 TSF							
Passenger Cars		11	3	14	5	13	18	256
2-axle		1	0	1	0	1	1	48
3-axle		0	0	0	0	0	0	16
4+-axle		2	1	3	1	2	3	76
Total Truck Trips		3	1	4	1	3	4	140
Total Trips (Actual Vehicles)[2]		**14**	**4**	**18**	**6**	**16**	**22**	**396**
Project Trip Generation Summary (PCE):								
High-Cube Cold Storage Warehouse	185.600 TSF							
Passenger Cars		11	3	14	5	13	18	256
2-axle		2	1	3	1	2	3	72
3-axle		1	0	1	0	1	1	30
4+-axle		7	2	9	2	6	8	224
Total Truck Trips (PCE)		10	3	13	3	9	12	326
Total Trips (PCE)[2]		**21**	**6**	**27**	**8**	**22**	**30**	**582**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

TABLE B: PHASE 2 TRIP GENERATION SUMMARY

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Trip Generation Summary (Actual):								
High-Cube Cold Storage Warehouse	235.600 TSF							
Passenger Cars		15	4	19	6	16	22	326
2-axle		2	1	3	1	2	3	62
3-axle		1	0	1	0	1	1	20
4+-axle		3	1	4	1	3	4	96
Total Truck Trips		6	2	8	2	6	8	178
Total Trips (Actual Vehicles)[2]		**21**	**6**	**27**	**8**	**22**	**30**	**504**
Project Trip Generation Summary (PCE):								
High-Cube Cold Storage Warehouse	235.600 TSF							
Passenger Cars		15	4	19	6	16	22	326
2-axle		3	1	4	1	2	3	92
3-axle		1	0	1	0	1	1	38
4+-axle		9	3	12	3	8	11	286
Total Truck Trips (PCE)		13	4	17	4	11	15	416
Total Trips (PCE)[2]		**28**	**8**	**36**	**10**	**27**	**37**	**742**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

TABLE D: PHASE 3 TRIP GENERATION SUMMARY

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Trip Generation Summary (Actual):								
High-Cube Cold Storage Warehouse	335.600 TSF							
Passenger Cars		21	6	27	8	23	31	462
2-axle		3	1	4	1	2	3	86
3-axle		1	0	1	0	1	1	28
4+-axle		4	1	5	1	4	5	136
Total Truck Trips		8	2	10	2	7	9	250
Total Trips (Actual Vehicles)[2]		**29**	**8**	**37**	**10**	**30**	**40**	**712**
Project Trip Generation Summary (PCE):								
High-Cube Cold Storage Warehouse	335.600 TSF							
Passenger Cars		21	6	27	8	23	31	462
2-axle		4	1	5	1	4	5	130
3-axle		2	1	3	1	1	2	56
4+-axle		13	4	17	4	11	15	406
Total Truck Trips (PCE)		19	6	25	6	16	22	592
Total Trips (PCE)[2]		**40**	**12**	**52**	**14**	**39**	**53**	**1,054**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

TABLE E: PHASE 4 (BUILDOUT) TRIP GENERATION SUMMARY

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Trip Generation Summary (Actual):								
High-Cube Cold Storage Warehouse	515.334 TSF							
Passenger Cars		32	10	42	13	35	48	710
2-axle		4	1	5	1	4	5	134
3-axle		1	0	1	0	1	1	42
4+-axle		6	2	8	2	6	8	208
Total Truck Trips		11	3	14	3	11	14	384
Total Trips (Actual Vehicles)[2]		**43**	**13**	**56**	**16**	**46**	**62**	**1,094**
Project Trip Generation Summary (PCE):								
High-Cube Cold Storage Warehouse	515.334 TSF							
Passenger Cars		32	10	42	13	35	48	710
2-axle		6	2	8	2	5	7	200
3-axle		3	1	4	1	2	3	84
4+-axle		19	6	25	6	17	23	624
Total Truck Trips (PCE)		28	9	37	9	24	33	908
Total Trips (PCE)[2]		**60**	**19**	**79**	**22**	**59**	**81**	**1,618**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

ATTACHMENT B: TRAFFIC SIGNAL WARRANTS

E+P PHASE 1

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

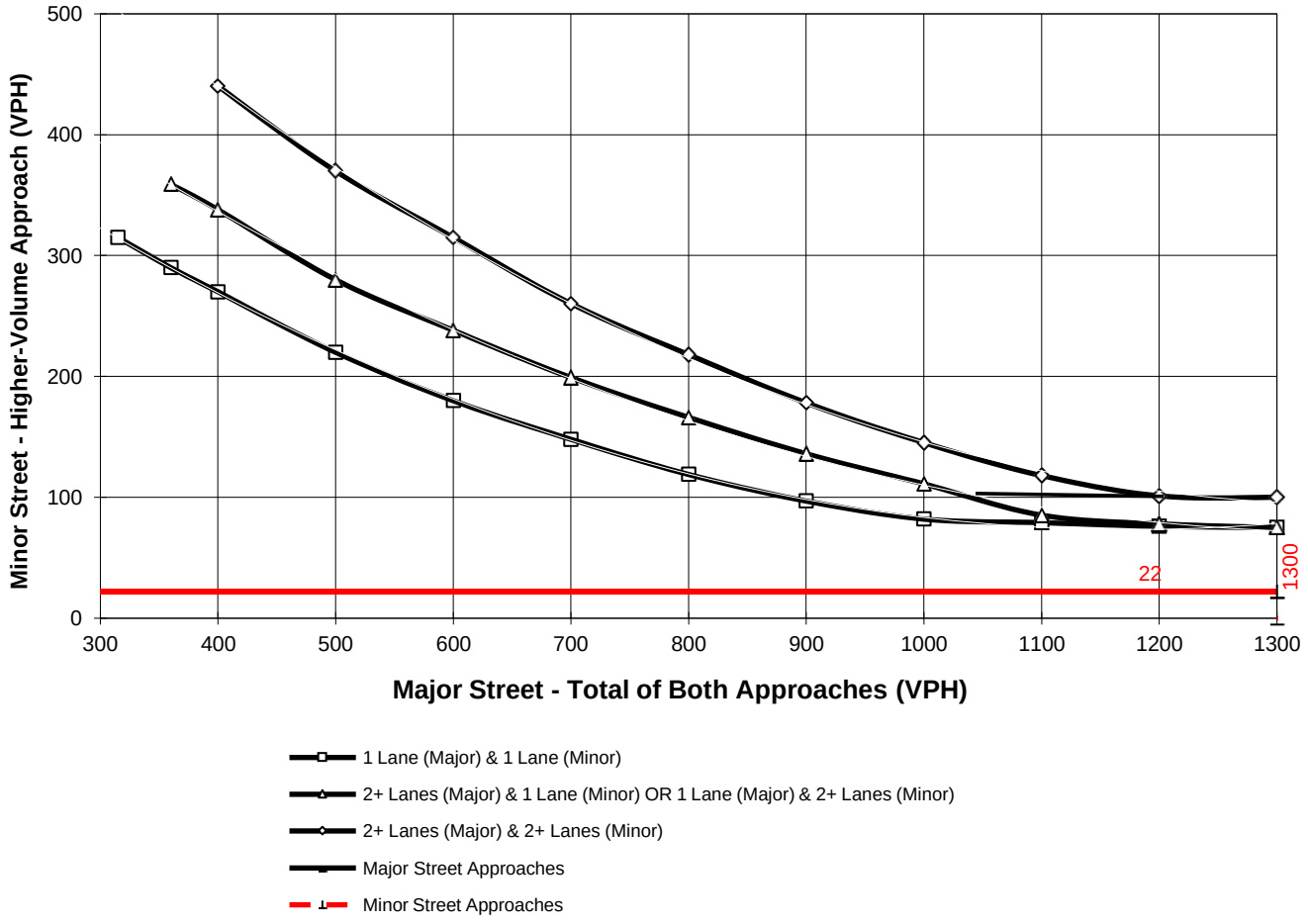
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **US Highway 395**
Total of Both Approaches (VPH) = **2445**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Avenal St.**
High Volume Approach (VPH) = **22**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST _____ CO _____ RTE _____ PM _____ TRAFFIC CONDITIONS **E+P**

CALC CS DATE 02/17/21

Jurisdiction: **City of Hesperia** CHK CS DATE 02/17/21

Major Street: **US 395** Critical Approach Speed (Major) 45 mph

Minor Street: **Avenal St.** Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lane **1** laneMajor

Street Future ADT = **26,283** vpd Minor Street Future ADT = **291** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **26,283** / *1* **291**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2 +*	9,600	6,720	3,200	2,240
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **26,283** / *1* **291**	12,000	8,400 *	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2 +*	14,400	10,080	1,600	1,120
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 17% **B** 34%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

E+P PHASE 2

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

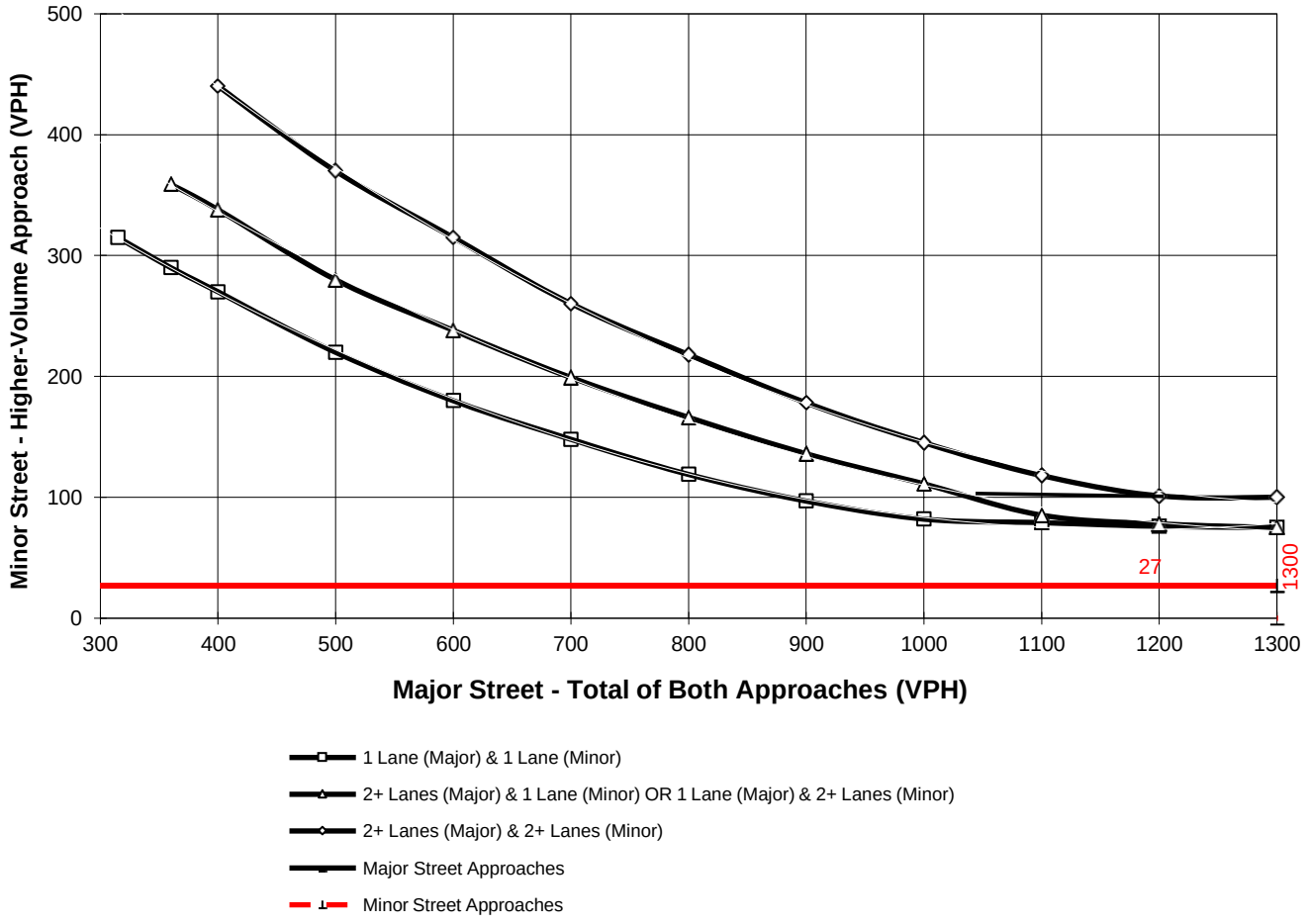
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P (Phase 2) Conditions - Weekday PM Peak Hour**

Major Street Name = **US Highway 395**
Total of Both Approaches (VPH) = **2449**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Avenal St.**
High Volume Approach (VPH) = **27**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST _____ CO _____ RTE _____ PM _____ TRAFFIC CONDITIONS **E+P**

CALC CS DATE 02/17/21

Jurisdiction: **City of Hesperia** CHK CS DATE 02/17/21

Major Street: **US 395** Critical Approach Speed (Major) 45 mph

Minor Street: **Avenal St.** Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lane **1** laneMajor

Street Future ADT = **26,363** vpd Minor Street Future ADT = **371** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **26,363** / *1* **371**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2 +*	9,600	6,720	3,200	2,240
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **26,363** / *1* **371**	12,000	8,400 *	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2 +*	14,400	10,080	1,600	1,120
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 22% **B** 44%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

E+P PHASE 3

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

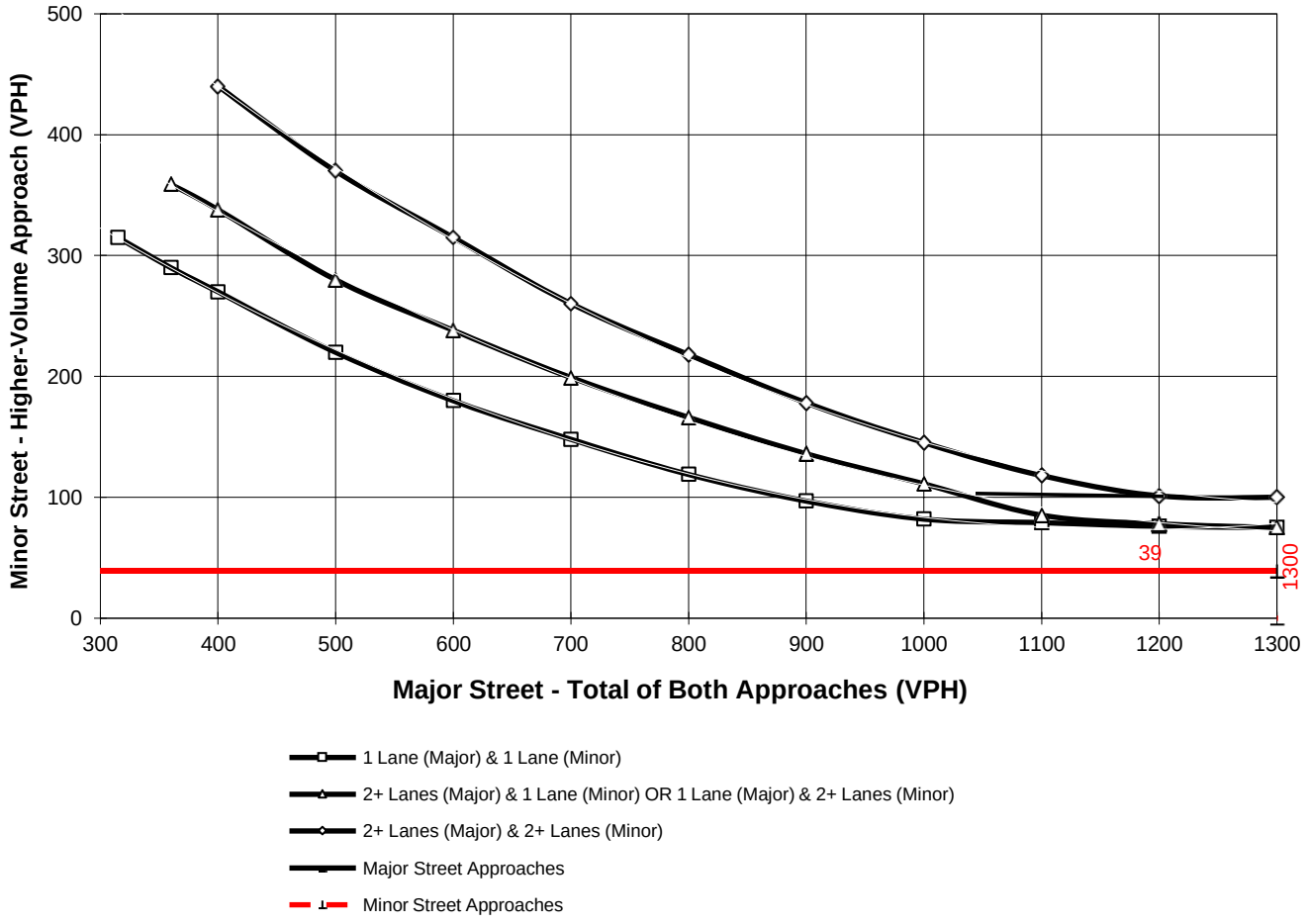
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P (Phase 3) Conditions - Weekday PM Peak Hour**

Major Street Name = **US Highway 395**
Total of Both Approaches (VPH) = **2451**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Avenal St.**
High Volume Approach (VPH) = **39**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST _____ CO _____ RTE _____ PM _____ TRAFFIC CONDITIONS **E+P**

CALC CS DATE 02/17/21

Jurisdiction: **City of Hesperia** CHK CS DATE 02/17/21

Major Street: **US 395** Critical Approach Speed (Major) 45 mph

Minor Street: **Avenal St.** Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lane **1** laneMajor

Street Future ADT = **26,519** vpd Minor Street Future ADT = **527** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **26,519** / *1* **527**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2 +*	9,600	6,720	3,200	2,240
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **26,519** / *1* **527**	12,000	8,400 *	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2 +*	14,400	10,080	1,600	1,120
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 31% **B** 62%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

E+P PHASE 4

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

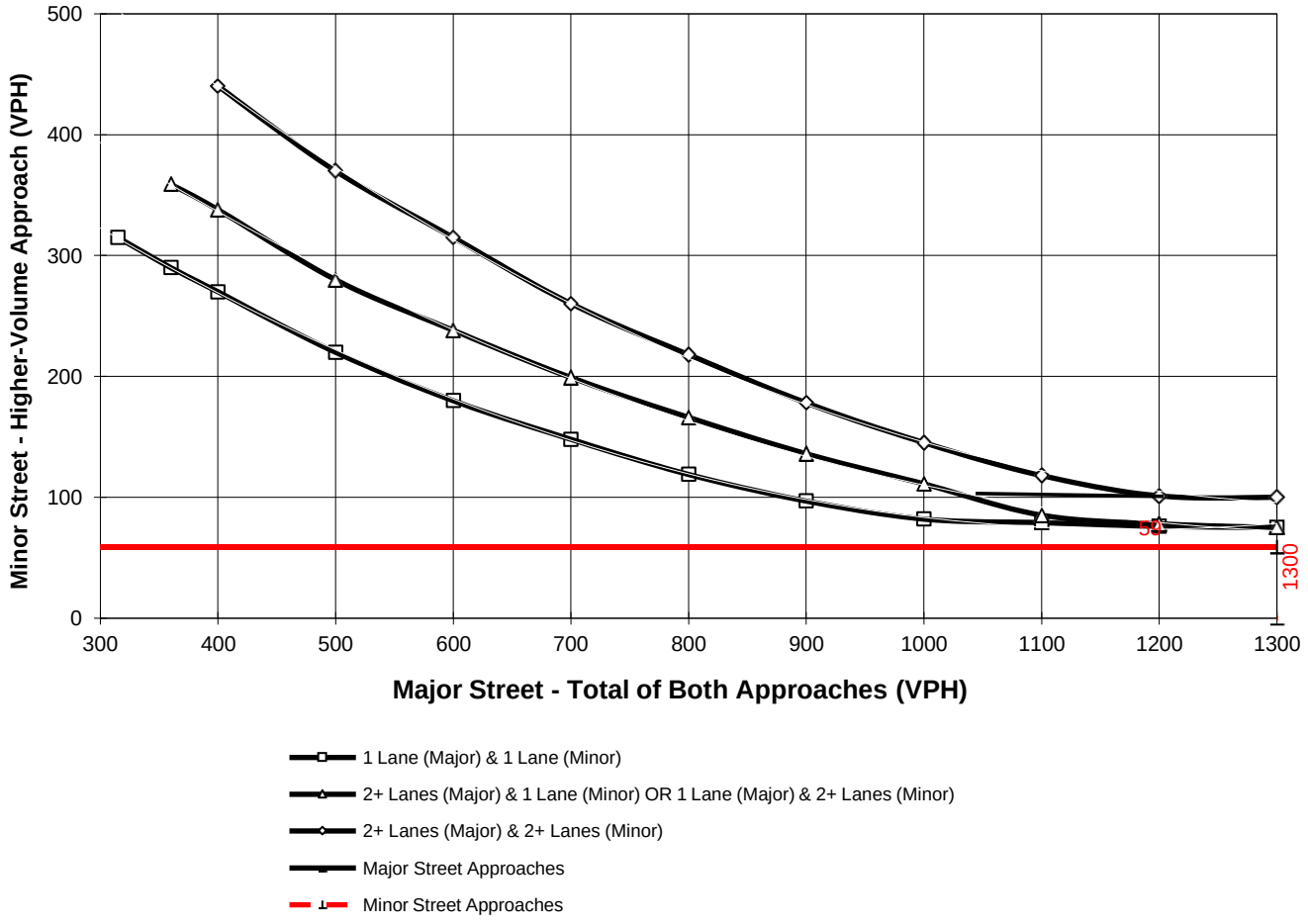
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P (Phase 4) Conditions - Weekday PM Peak Hour**

Major Street Name = **US Highway 395**
Total of Both Approaches (VPH) = **2459**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Avenal St.**
High Volume Approach (VPH) = **59**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST _____ CO _____ RTE _____ PM _____ TRAFFIC CONDITIONS **E+P**

CALC CS DATE 02/17/21

Jurisdiction: **City of Hesperia** CHK CS DATE 02/17/21

Major Street: **US 395** Critical Approach Speed (Major) 45 mph

Minor Street: **Avenal St.** Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lane **1** laneMajor

Street Future ADT = **26,801** vpd Minor Street Future ADT = **809** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **26,801** / *1* **809**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2 +*	9,600	6,720	3,200	2,240
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **26,801** / *1* **809**	12,000	8,400 *	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2 +*	14,400	10,080	1,600	1,120
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS		2 CONDITIONS	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 48% **B** 95%	80%		80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

HORIZON YEAR (2040) WITH PROJECT

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

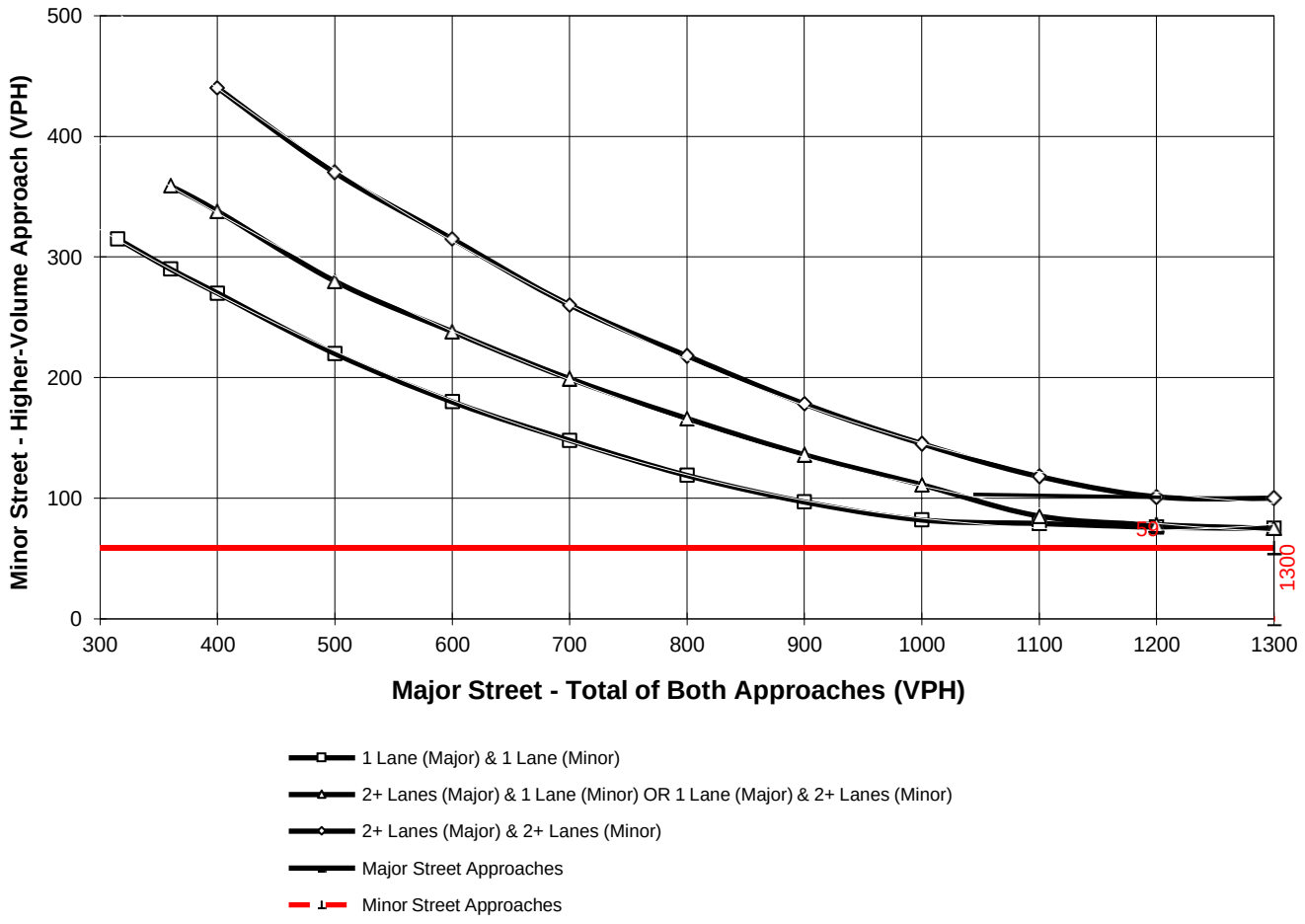
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2040 With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **US Highway 395**
Total of Both Approaches (VPH) = **4887**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Avenal St.**
High Volume Approach (VPH) = **59**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST _____ CO _____ RTE _____ PM _____

TRAFFIC CONDITIONS **2040 WP**

CALC CS DATE 02/17/21

CHK CS DATE 02/17/21

Jurisdiction: **City of Hesperia**

Major Street: **US 395** Critical Approach Speed (Major) 45 mph

Minor Street: **Avenal St.** Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** laneMajor

Street Future ADT = **39,557** vpd Minor Street Future ADT = **809** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **39,557**	*1* **809**	9,600	6,720 *	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **39,557**	*1* **809**	14,400	10,080 *	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 48% **B** 95%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

ATTACHMENT C: E+P PHASE 1 HCM WORKSHEETS

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	6	0	0	0	988	19	2	1199	0
Future Vol, veh/h	0	0	0	6	0	0	0	988	19	2	1199	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	7	0	0	0	1074	21	2	1303	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2392	2392	1085	-	0	0	1095	0	0
Stage 1	1085	1085	-	-	-	-	-	-	-
Stage 2	1307	1307	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	96	93	382	0	-	-	645	-	0
Stage 1	327	295	-	0	-	-	-	-	0
Stage 2	256	232	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	96	0	382	-	-	-	645	-	-
Mov Cap-2 Maneuver	174	0	-	-	-	-	-	-	-
Stage 1	327	0	-	-	-	-	-	-	-
Stage 2	255	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	174	645	-
HCM Lane V/C Ratio	-	-	0.037	0.003	-
HCM Control Delay (s)	-	-	26.5	10.6	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	0	0	0	3	1007	0	0	1205	0
Future Vol, veh/h	0	0	1	0	0	0	3	1007	0	0	1205	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	1	0	0	0	3	1119	0	0	1339	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2464	2464	1339	2465	2464	1119	1339	0	0	1119	0	0
Stage 1	1339	1339	-	1125	1125	-	-	-	-	-	-	-
Stage 2	1125	1125	-	1340	1339	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	21	31	189	21	31	254	521	-	-	632	-	-
Stage 1	190	224	-	251	283	-	-	-	-	-	-	-
Stage 2	251	283	-	190	224	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	21	31	189	21	31	254	521	-	-	632	-	-
Mov Cap-2 Maneuver	21	31	-	21	31	-	-	-	-	-	-	-
Stage 1	187	224	-	247	279	-	-	-	-	-	-	-
Stage 2	247	279	-	189	224	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.2	0	0	0
HCM LOS	C	A		

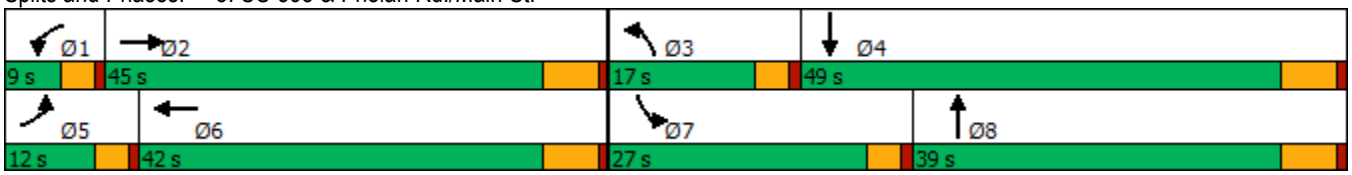
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	521	-	-	189	-	632	-	-
HCM Lane V/C Ratio	0.006	-	-	0.006	-	-	-	-
HCM Control Delay (s)	12	0	-	24.2	0	0	-	-
HCM Lane LOS	B	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	49	665	4	324	93	724	215	959
Future Volume (vph)	49	665	4	324	93	724	215	959
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	17.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	12.0	45.0	9.0	42.0	17.0	39.0	27.0	49.0
Total Split (%)	10.0%	37.5%	7.5%	35.0%	14.2%	32.5%	22.5%	40.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 93.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	665	108	4	324	237	93	724	9	215	959	32
Future Volume (veh/h)	49	665	108	4	324	237	93	724	9	215	959	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	51	686	67	4	334	165	96	746	9	222	989	29
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	70	880	86	9	539	261	120	996	12	262	1275	37
Arrive On Green	0.04	0.28	0.28	0.01	0.24	0.24	0.07	0.29	0.29	0.16	0.38	0.38
Sat Flow, veh/h	1619	3148	307	1619	2234	1082	1619	3461	42	1619	3393	99
Grp Volume(v), veh/h	51	372	381	4	254	245	96	369	386	222	498	520
Grp Sat Flow(s),veh/h/ln	1619	1710	1745	1619	1710	1605	1619	1710	1792	1619	1710	1782
Q Serve(g_s), s	2.3	15.1	15.2	0.2	10.0	10.3	4.4	14.8	14.8	10.1	19.4	19.4
Cycle Q Clear(g_c), s	2.3	15.1	15.2	0.2	10.0	10.3	4.4	14.8	14.8	10.1	19.4	19.4
Prop In Lane	1.00		0.18	1.00		0.67	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	70	478	488	9	413	388	120	492	516	262	643	670
V/C Ratio(X)	0.72	0.78	0.78	0.46	0.62	0.63	0.80	0.75	0.75	0.85	0.78	0.78
Avail Cap(c_a), veh/h	172	883	901	107	816	766	279	748	784	493	974	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	25.0	25.0	37.4	25.5	25.6	34.4	24.4	24.4	30.7	20.8	20.8
Incr Delay (d2), s/veh	10.0	2.8	2.8	26.1	1.5	1.7	8.7	2.8	2.6	5.6	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	5.6	5.8	0.1	3.7	3.6	1.9	5.5	5.8	3.9	6.9	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.6	27.8	27.8	63.5	27.0	27.3	43.0	27.2	27.0	36.3	23.4	23.3
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		804			503			851			1240	
Approach Delay, s/veh		28.9			27.5			28.9			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	27.1	9.6	34.4	7.3	24.2	16.2	27.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	39.0	13.0	43.0	8.0	36.0	23.0	33.0
Max Q Clear Time (g_c+I1), s	2.2	17.2	6.4	21.4	4.3	12.3	12.1	16.8
Green Ext Time (p_c), s	0.0	3.9	0.1	7.0	0.0	2.6	0.3	4.3

Intersection Summary	
HCM 6th Ctrl Delay	27.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	0	2	0	1407	7	1	1030	0
Future Vol, veh/h	0	0	0	20	0	2	0	1407	7	1	1030	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	22	0	2	0	1529	8	1	1120	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2655	2655	1533	-	0	0	1537	0	0
Stage 1	1533	1533	-	-	-	-	-	-	-
Stage 2	1122	1122	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	72	70	242	0	-	-	438	-	0
Stage 1	198	180	-	0	-	-	-	-	0
Stage 2	314	284	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	72	0	242	-	-	-	438	-	-
Mov Cap-2 Maneuver	141	0	-	-	-	-	-	-	-
Stage 1	198	0	-	-	-	-	-	-	-
Stage 2	313	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.2	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	147	438	-
HCM Lane V/C Ratio	-	-	0.163	0.002	-
HCM Control Delay (s)	-	-	34.2	13.2	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	4	0	0	0	8	1411	0	0	1046	4
Future Vol, veh/h	3	0	4	0	0	0	8	1411	0	0	1046	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	4	0	0	0	8	1470	0	0	1090	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2579	2579	1093	2580	2581	1470	1095	0	0	1470	0	0
Stage 1	1093	1093	-	1486	1486	-	-	-	-	-	-	-
Stage 2	1486	1486	-	1094	1095	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	17	26	263	17	26	158	645	-	-	465	-	-
Stage 1	262	293	-	157	190	-	-	-	-	-	-	-
Stage 2	157	190	-	262	292	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	16	24	263	16	24	158	644	-	-	465	-	-
Mov Cap-2 Maneuver	16	24	-	16	24	-	-	-	-	-	-	-
Stage 1	244	293	-	146	177	-	-	-	-	-	-	-
Stage 2	146	177	-	258	292	-	-	-	-	-	-	-

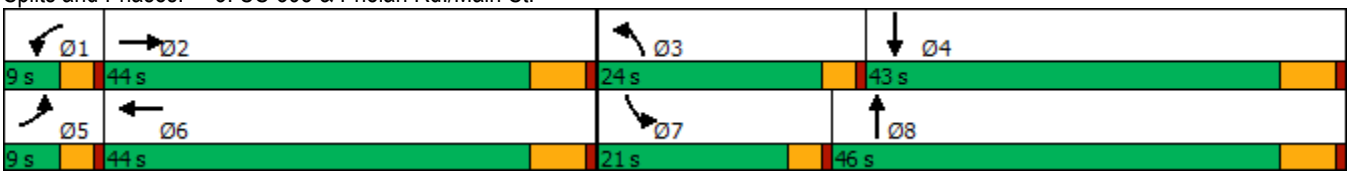
Approach	EB	WB	NB	SB
HCM Control Delay, s	133.1	0	0.1	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	644	-	-	35	-	465	-	-
HCM Lane V/C Ratio	0.013	-	-	0.208	-	-	-	-
HCM Control Delay (s)	10.7	0	-	133.1	0	0	-	-
HCM Lane LOS	B	A	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	568	9	668	165	1108	207	796
Future Volume (vph)	46	568	9	668	165	1108	207	796
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	16.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	9.0	44.0	9.0	44.0	24.0	46.0	21.0	43.0
Total Split (%)	7.5%	36.7%	7.5%	36.7%	20.0%	38.3%	17.5%	35.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 116.6
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	568	69	9	668	266	165	1108	26	207	796	48
Future Volume (veh/h)	46	568	69	9	668	266	165	1108	26	207	796	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	48	598	45	9	703	196	174	1166	20	218	838	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	1037	78	18	782	218	200	1193	20	239	1237	53
Arrive On Green	0.04	0.32	0.32	0.01	0.30	0.30	0.12	0.35	0.35	0.15	0.37	0.37
Sat Flow, veh/h	1619	3221	242	1619	2641	736	1619	3440	59	1619	3341	144
Grp Volume(v), veh/h	48	317	326	9	455	444	174	579	607	218	429	445
Grp Sat Flow(s),veh/h/ln	1619	1710	1753	1619	1710	1667	1619	1710	1789	1619	1710	1774
Q Serve(g_s), s	3.4	17.8	17.9	0.6	29.5	29.5	12.2	38.6	38.7	15.3	24.3	24.3
Cycle Q Clear(g_c), s	3.4	17.8	17.9	0.6	29.5	29.5	12.2	38.6	38.7	15.3	24.3	24.3
Prop In Lane	1.00		0.14	1.00		0.44	1.00		0.03	1.00		0.08
Lane Grp Cap(c), veh/h	59	550	564	18	506	494	200	593	620	239	633	657
V/C Ratio(X)	0.81	0.58	0.58	0.51	0.90	0.90	0.87	0.98	0.98	0.91	0.68	0.68
Avail Cap(c_a), veh/h	70	563	577	70	563	549	281	593	620	239	633	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	32.6	32.6	56.8	39.0	39.0	49.6	37.3	37.3	48.5	30.5	30.5
Incr Delay (d2), s/veh	40.6	1.4	1.4	16.0	16.3	16.7	16.8	31.2	30.5	35.7	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.1	7.3	0.3	13.8	13.5	5.6	20.0	20.8	8.2	9.8	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.7	34.0	34.0	72.8	55.3	55.7	66.4	68.5	67.8	84.2	33.6	33.5
LnGrp LOS	F	C	C	E	E	E	E	E	E	F	C	C
Approach Vol, veh/h		691			908			1360			1092	
Approach Delay, s/veh		38.3			55.6			67.9			43.6	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	43.1	18.3	48.7	8.2	40.2	21.0	46.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	38.0	20.0	37.0	5.0	38.0	17.0	40.0
Max Q Clear Time (g_c+I1), s	2.6	19.9	14.2	26.3	5.4	31.5	17.3	40.7
Green Ext Time (p_c), s	0.0	3.1	0.1	4.1	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.6
HCM 6th LOS	D

ATTACHMENT D: E+P PHASE 2 HCM WORKSHEETS

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	7	0	1	0	988	26	2	1199	0
Future Vol, veh/h	0	0	0	7	0	1	0	988	26	2	1199	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	8	0	1	0	1074	28	2	1303	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2395	2395	1088	-	0	0	1102	0	0
Stage 1	1088	1088	-	-	-	-	-	-	-
Stage 2	1307	1307	-	-	-	-	-	-	-
Critical Hdwy	5.4	5.4	5.4	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	73	71	337	0	-	-	641	-	0
Stage 1	326	294	-	0	-	-	-	-	0
Stage 2	256	232	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	73	0	337	-	-	-	641	-	-
Mov Cap-2 Maneuver	163	0	-	-	-	-	-	-	-
Stage 1	326	0	-	-	-	-	-	-	-
Stage 2	255	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.8	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	174	641	-
HCM Lane V/C Ratio	-	-	0.05	0.003	-
HCM Control Delay (s)	-	-	26.8	10.6	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	0	0	0	3	1014	0	0	1206	0
Future Vol, veh/h	0	0	1	0	0	0	3	1014	0	0	1206	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	1	0	0	0	3	1127	0	0	1340	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2473	2473	1340	2474	2473	1127	1340	0	0	1127	0	0
Stage 1	1340	1340	-	1133	1133	-	-	-	-	-	-	-
Stage 2	1133	1133	-	1341	1340	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	21	30	188	21	30	251	521	-	-	627	-	-
Stage 1	190	223	-	249	280	-	-	-	-	-	-	-
Stage 2	249	280	-	190	223	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	21	30	188	21	30	251	521	-	-	627	-	-
Mov Cap-2 Maneuver	21	30	-	21	30	-	-	-	-	-	-	-
Stage 1	187	223	-	245	276	-	-	-	-	-	-	-
Stage 2	245	276	-	189	223	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.3	0	0	0
HCM LOS	C	A		

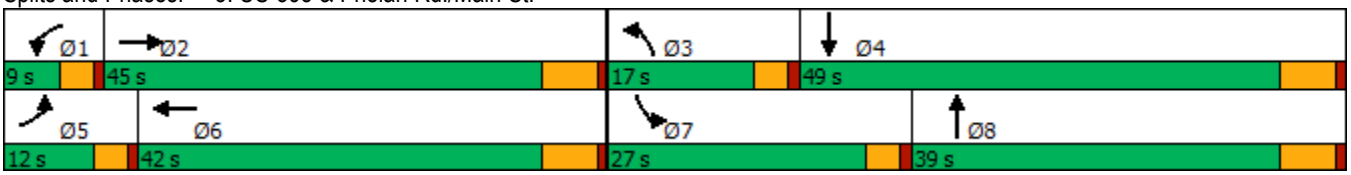
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	521	-	-	188	-	627	-	-
HCM Lane V/C Ratio	0.006	-	-	0.006	-	-	-	-
HCM Control Delay (s)	12	0	-	24.3	0	0	-	-
HCM Lane LOS	B	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

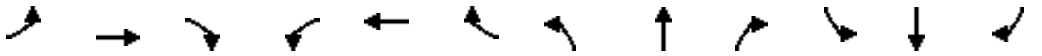
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	665	4	324	93	725	216	959
Future Volume (vph)	50	665	4	324	93	725	216	959
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	17.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	12.0	45.0	9.0	42.0	17.0	39.0	27.0	49.0
Total Split (%)	10.0%	37.5%	7.5%	35.0%	14.2%	32.5%	22.5%	40.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 93.5
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	665	108	4	324	242	93	725	9	216	959	32
Future Volume (veh/h)	50	665	108	4	324	242	93	725	9	216	959	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	52	686	67	4	334	170	96	747	9	223	989	29
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	71	880	86	9	532	266	120	994	12	264	1275	37
Arrive On Green	0.04	0.28	0.28	0.01	0.24	0.24	0.07	0.29	0.29	0.16	0.38	0.38
Sat Flow, veh/h	1619	3148	307	1619	2209	1102	1619	3461	42	1619	3393	99
Grp Volume(v), veh/h	52	372	381	4	257	247	96	369	387	223	498	520
Grp Sat Flow(s),veh/h/ln	1619	1710	1745	1619	1710	1602	1619	1710	1792	1619	1710	1782
Q Serve(g_s), s	2.4	15.1	15.2	0.2	10.1	10.4	4.4	14.8	14.8	10.1	19.4	19.4
Cycle Q Clear(g_c), s	2.4	15.1	15.2	0.2	10.1	10.4	4.4	14.8	14.8	10.1	19.4	19.4
Prop In Lane	1.00		0.18	1.00		0.69	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	71	478	488	9	412	386	120	491	515	264	643	670
V/C Ratio(X)	0.73	0.78	0.78	0.46	0.62	0.64	0.80	0.75	0.75	0.85	0.78	0.78
Avail Cap(c_a), veh/h	172	883	901	107	816	764	279	748	784	493	974	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	25.0	25.0	37.4	25.6	25.7	34.4	24.4	24.4	30.7	20.8	20.8
Incr Delay (d2), s/veh	10.1	2.8	2.8	26.1	1.5	1.8	8.7	2.8	2.7	5.6	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	5.6	5.8	0.1	3.8	3.7	1.9	5.5	5.8	3.9	6.9	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.8	27.8	27.8	63.5	27.1	27.5	43.0	27.3	27.1	36.3	23.4	23.3
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		805			508			852			1241	
Approach Delay, s/veh		29.0			27.6			29.0			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	27.1	9.6	34.4	7.3	24.2	16.3	27.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	39.0	13.0	43.0	8.0	36.0	23.0	33.0
Max Q Clear Time (g_c+I1), s	2.2	17.2	6.4	21.4	4.4	12.4	12.1	16.8
Green Ext Time (p_c), s	0.0	3.9	0.1	7.0	0.0	2.6	0.3	4.3

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	0	2	0	1407	9	1	1030	0
Future Vol, veh/h	0	0	0	25	0	2	0	1407	9	1	1030	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	27	0	2	0	1529	10	1	1120	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2656	2656	1534	-	0	0	1539	0	0
Stage 1	1534	1534	-	-	-	-	-	-	-
Stage 2	1122	1122	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	72	70	241	0	-	-	438	-	0
Stage 1	198	180	-	0	-	-	-	-	0
Stage 2	314	284	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	72	0	241	-	-	-	438	-	-
Mov Cap-2 Maneuver	141	0	-	-	-	-	-	-	-
Stage 1	198	0	-	-	-	-	-	-	-
Stage 2	313	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	145	438	-
HCM Lane V/C Ratio	-	-	0.202	0.002	-
HCM Control Delay (s)	-	-	36	13.2	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	4	0	0	0	8	1413	0	0	1051	4
Future Vol, veh/h	3	0	4	0	0	0	8	1413	0	0	1051	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	4	0	0	0	8	1472	0	0	1095	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2586	2586	1098	2587	2588	1472	1100	0	0	1472	0	0
Stage 1	1098	1098	-	1488	1488	-	-	-	-	-	-	-
Stage 2	1488	1488	-	1099	1100	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	17	26	261	17	26	158	642	-	-	464	-	-
Stage 1	260	291	-	156	189	-	-	-	-	-	-	-
Stage 2	156	189	-	260	290	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	16	24	261	16	24	158	641	-	-	464	-	-
Mov Cap-2 Maneuver	16	24	-	16	24	-	-	-	-	-	-	-
Stage 1	242	291	-	145	176	-	-	-	-	-	-	-
Stage 2	145	176	-	256	290	-	-	-	-	-	-	-

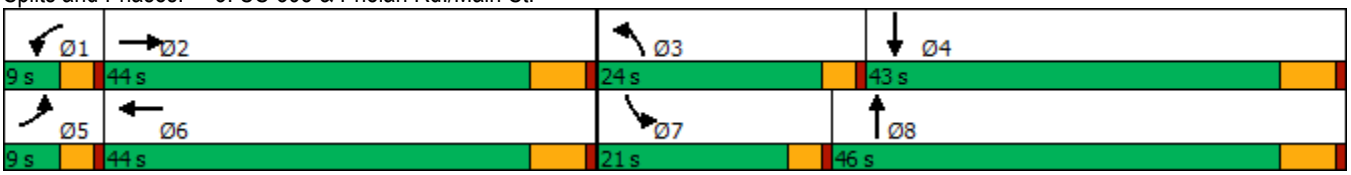
Approach	EB	WB	NB	SB
HCM Control Delay, s	133.1	0	0.1	0
HCM LOS	F	A		

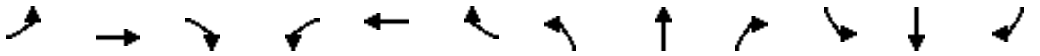
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	641	-	-	35	-	464	-	-
HCM Lane V/C Ratio	0.013	-	-	0.208	-	-	-	-
HCM Control Delay (s)	10.7	0	-	133.1	0	0	-	-
HCM Lane LOS	B	A	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	568	9	668	165	1108	211	796
Future Volume (vph)	46	568	9	668	165	1108	211	796
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	16.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	9.0	44.0	9.0	44.0	24.0	46.0	21.0	43.0
Total Split (%)	7.5%	36.7%	7.5%	36.7%	20.0%	38.3%	17.5%	35.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 116.6
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	568	69	9	668	267	165	1108	26	211	796	49
Future Volume (veh/h)	46	568	69	9	668	267	165	1108	26	211	796	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	48	598	45	9	703	197	174	1166	20	222	838	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	1037	78	18	781	219	200	1192	20	238	1235	55
Arrive On Green	0.04	0.32	0.32	0.01	0.30	0.30	0.12	0.35	0.35	0.15	0.37	0.37
Sat Flow, veh/h	1619	3221	242	1619	2638	739	1619	3440	59	1619	3336	147
Grp Volume(v), veh/h	48	317	326	9	456	444	174	579	607	222	429	446
Grp Sat Flow(s),veh/h/ln	1619	1710	1753	1619	1710	1667	1619	1710	1789	1619	1710	1773
Q Serve(g_s), s	3.4	17.8	17.9	0.6	29.5	29.5	12.2	38.7	38.7	15.6	24.4	24.4
Cycle Q Clear(g_c), s	3.4	17.8	17.9	0.6	29.5	29.5	12.2	38.7	38.7	15.6	24.4	24.4
Prop In Lane	1.00		0.14	1.00		0.44	1.00		0.03	1.00		0.08
Lane Grp Cap(c), veh/h	59	551	565	18	507	494	200	593	620	238	633	656
V/C Ratio(X)	0.81	0.58	0.58	0.51	0.90	0.90	0.87	0.98	0.98	0.93	0.68	0.68
Avail Cap(c_a), veh/h	70	563	577	70	563	549	281	593	620	238	633	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	32.6	32.6	56.8	39.0	39.0	49.7	37.3	37.3	48.6	30.6	30.6
Incr Delay (d2), s/veh	40.6	1.4	1.4	16.0	16.4	16.8	16.8	31.3	30.6	39.6	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.1	7.3	0.3	13.8	13.5	5.6	20.0	20.8	8.6	9.8	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.8	33.9	34.0	72.8	55.4	55.7	66.5	68.6	67.9	88.2	33.7	33.6
LnGrp LOS	F	C	C	E	E	E	E	E	E	F	C	C
Approach Vol, veh/h		691			909			1360			1097	
Approach Delay, s/veh		38.3			55.7			68.0			44.7	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	43.2	18.3	48.7	8.2	40.2	21.0	46.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	38.0	20.0	37.0	5.0	38.0	17.0	40.0
Max Q Clear Time (g_c+I1), s	2.6	19.9	14.2	26.4	5.4	31.5	17.6	40.7
Green Ext Time (p_c), s	0.0	3.1	0.1	4.1	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.9
HCM 6th LOS	D

ATTACHMENT E: E+P PHASE 3 HCM WORKSHEETS

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	11	0	1	0	988	37	3	1199	0
Future Vol, veh/h	0	0	0	11	0	1	0	988	37	3	1199	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	12	0	1	0	1074	40	3	1303	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2403	2403	1094	-	0	0	1114	0	0
Stage 1	1094	1094	-	-	-	-	-	-	-
Stage 2	1309	1309	-	-	-	-	-	-	-
Critical Hdwy	5.4	5.4	5.4	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	72	70	335	0	-	-	634	-	0
Stage 1	324	292	-	0	-	-	-	-	0
Stage 2	255	231	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	72	0	335	-	-	-	634	-	-
Mov Cap-2 Maneuver	162	0	-	-	-	-	-	-	-
Stage 1	324	0	-	-	-	-	-	-	-
Stage 2	254	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	169	634	-
HCM Lane V/C Ratio	-	-	0.077	0.005	-
HCM Control Delay (s)	-	-	28.1	10.7	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	0	0	0	3	1025	0	0	1210	0
Future Vol, veh/h	0	0	1	0	0	0	3	1025	0	0	1210	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	1	0	0	0	3	1139	0	0	1344	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2489	2489	1344	2490	2489	1139	1344	0	0	1139	0	0
Stage 1	1344	1344	-	1145	1145	-	-	-	-	-	-	-
Stage 2	1145	1145	-	1345	1344	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	20	30	187	20	30	247	519	-	-	621	-	-
Stage 1	189	222	-	245	277	-	-	-	-	-	-	-
Stage 2	245	277	-	189	222	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	20	30	187	20	30	247	519	-	-	621	-	-
Mov Cap-2 Maneuver	20	30	-	20	30	-	-	-	-	-	-	-
Stage 1	186	222	-	241	273	-	-	-	-	-	-	-
Stage 2	241	273	-	188	222	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.4	0	0	0
HCM LOS	C	A		

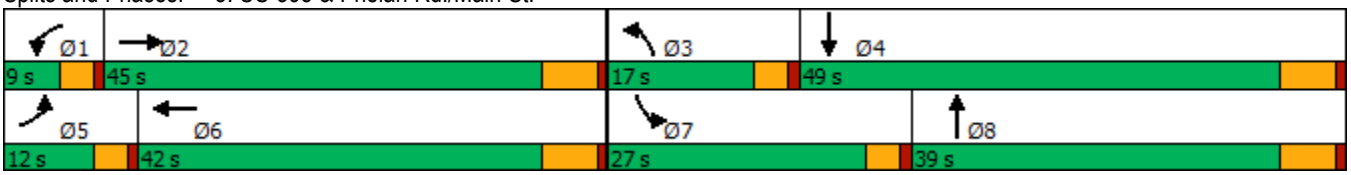
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	519	-	-	187	-	621	-	-
HCM Lane V/C Ratio	0.006	-	-	0.006	-	-	-	-
HCM Control Delay (s)	12	0	-	24.4	0	0	-	-
HCM Lane LOS	B	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	665	4	324	93	726	219	959
Future Volume (vph)	50	665	4	324	93	726	219	959
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	17.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	12.0	45.0	9.0	42.0	17.0	39.0	27.0	49.0
Total Split (%)	10.0%	37.5%	7.5%	35.0%	14.2%	32.5%	22.5%	40.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 94
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	665	108	4	324	252	93	726	9	219	959	33
Future Volume (veh/h)	50	665	108	4	324	252	93	726	9	219	959	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	52	686	67	4	334	181	96	748	9	226	989	30
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	71	880	86	9	520	276	120	989	12	267	1274	39
Arrive On Green	0.04	0.28	0.28	0.01	0.24	0.24	0.07	0.29	0.29	0.16	0.38	0.38
Sat Flow, veh/h	1619	3148	307	1619	2158	1146	1619	3461	42	1619	3389	103
Grp Volume(v), veh/h	52	372	381	4	263	252	96	370	387	226	499	520
Grp Sat Flow(s),veh/h/ln	1619	1710	1745	1619	1710	1594	1619	1710	1793	1619	1710	1781
Q Serve(g_s), s	2.4	15.2	15.2	0.2	10.4	10.8	4.4	14.9	14.9	10.2	19.4	19.4
Cycle Q Clear(g_c), s	2.4	15.2	15.2	0.2	10.4	10.8	4.4	14.9	14.9	10.2	19.4	19.4
Prop In Lane	1.00		0.18	1.00		0.72	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	71	478	488	9	412	384	120	489	512	267	643	670
V/C Ratio(X)	0.73	0.78	0.78	0.46	0.64	0.66	0.80	0.76	0.76	0.85	0.78	0.78
Avail Cap(c_a), veh/h	171	883	901	107	815	759	279	747	783	493	973	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	25.1	25.1	37.5	25.7	25.8	34.4	24.6	24.6	30.6	20.8	20.8
Incr Delay (d2), s/veh	10.1	2.8	2.8	26.1	1.7	1.9	8.7	2.9	2.8	5.6	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	5.7	5.8	0.1	3.9	3.8	1.9	5.6	5.8	4.0	6.9	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.8	27.9	27.8	63.6	27.4	27.7	43.1	27.5	27.4	36.2	23.4	23.3
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		805			519			853			1245	
Approach Delay, s/veh		29.0			27.8			29.2			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	27.1	9.6	34.4	7.3	24.2	16.4	27.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	39.0	13.0	43.0	8.0	36.0	23.0	33.0
Max Q Clear Time (g_c+I1), s	2.2	17.2	6.4	21.4	4.4	12.8	12.2	16.9
Green Ext Time (p_c), s	0.0	3.9	0.1	7.0	0.0	2.7	0.3	4.3

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	36	0	3	0	1407	13	1	1030	0
Future Vol, veh/h	0	0	0	36	0	3	0	1407	13	1	1030	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	39	0	3	0	1529	14	1	1120	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2658	2658	1536	-	0	0	1543	0	0
Stage 1	1536	1536	-	-	-	-	-	-	-
Stage 2	1122	1122	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	72	70	241	0	-	-	436	-	0
Stage 1	198	180	-	0	-	-	-	-	0
Stage 2	314	284	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	72	0	241	-	-	-	436	-	-
Mov Cap-2 Maneuver	141	0	-	-	-	-	-	-	-
Stage 1	198	0	-	-	-	-	-	-	-
Stage 2	313	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	39.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	146	436	-
HCM Lane V/C Ratio	-	-	0.29	0.002	-
HCM Control Delay (s)	-	-	39.4	13.3	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	4	0	0	0	8	1417	0	0	1062	4
Future Vol, veh/h	3	0	4	0	0	0	8	1417	0	0	1062	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	4	0	0	0	8	1476	0	0	1106	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2601	2601	1109	2602	2603	1476	1111	0	0	1476	0	0
Stage 1	1109	1109	-	1492	1492	-	-	-	-	-	-	-
Stage 2	1492	1492	-	1110	1111	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	17	25	257	17	25	157	636	-	-	462	-	-
Stage 1	257	288	-	156	189	-	-	-	-	-	-	-
Stage 2	156	189	-	256	287	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	16	23	257	16	23	157	635	-	-	462	-	-
Mov Cap-2 Maneuver	16	23	-	16	23	-	-	-	-	-	-	-
Stage 1	239	288	-	145	176	-	-	-	-	-	-	-
Stage 2	145	176	-	252	287	-	-	-	-	-	-	-

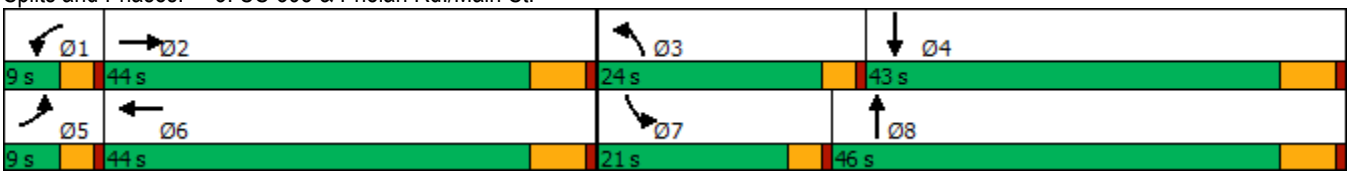
Approach	EB	WB	NB	SB
HCM Control Delay, s	137.7	0	0.1	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	635	-	-	34	-	462	-	-
HCM Lane V/C Ratio	0.013	-	-	0.214	-	-	-	-
HCM Control Delay (s)	10.7	0	-	137.7	0	0	-	-
HCM Lane LOS	B	A	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	568	9	668	165	1109	220	798
Future Volume (vph)	46	568	9	668	165	1109	220	798
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	16.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	9.0	44.0	9.0	44.0	24.0	46.0	21.0	43.0
Total Split (%)	7.5%	36.7%	7.5%	36.7%	20.0%	38.3%	17.5%	35.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 116.6
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	568	69	9	668	271	165	1109	26	220	798	49
Future Volume (veh/h)	46	568	69	9	668	271	165	1109	26	220	798	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	48	598	45	9	703	201	174	1167	20	232	840	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	1040	78	18	780	223	200	1191	20	238	1233	54
Arrive On Green	0.04	0.32	0.32	0.01	0.30	0.30	0.12	0.35	0.35	0.15	0.37	0.37
Sat Flow, veh/h	1619	3221	242	1619	2625	750	1619	3440	59	1619	3337	147
Grp Volume(v), veh/h	48	317	326	9	458	446	174	580	607	232	430	447
Grp Sat Flow(s),veh/h/ln	1619	1710	1753	1619	1710	1665	1619	1710	1789	1619	1710	1774
Q Serve(g_s), s	3.4	17.8	17.9	0.6	29.7	29.7	12.2	38.8	38.8	16.5	24.5	24.5
Cycle Q Clear(g_c), s	3.4	17.8	17.9	0.6	29.7	29.7	12.2	38.8	38.8	16.5	24.5	24.5
Prop In Lane	1.00		0.14	1.00		0.45	1.00		0.03	1.00		0.08
Lane Grp Cap(c), veh/h	59	552	566	18	508	495	200	592	619	238	632	655
V/C Ratio(X)	0.81	0.57	0.58	0.51	0.90	0.90	0.87	0.98	0.98	0.97	0.68	0.68
Avail Cap(c_a), veh/h	70	562	576	70	562	547	280	592	619	238	632	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	32.5	32.5	56.9	39.0	39.0	49.7	37.4	37.4	49.1	30.7	30.7
Incr Delay (d2), s/veh	40.7	1.4	1.4	16.1	16.7	17.1	16.9	31.9	31.1	50.8	3.2	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.1	7.3	0.3	14.0	13.7	5.6	20.2	21.0	9.7	9.9	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.0	33.9	33.9	72.9	55.7	56.1	66.6	69.3	68.6	99.9	33.9	33.8
LnGrp LOS	F	C	C	E	E	E	E	E	E	F	C	C
Approach Vol, veh/h		691			913			1361			1109	
Approach Delay, s/veh		38.2			56.0			68.6			47.6	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	43.3	18.3	48.7	8.2	40.3	21.0	46.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	38.0	20.0	37.0	5.0	38.0	17.0	40.0
Max Q Clear Time (g_c+I1), s	2.6	19.9	14.2	26.5	5.4	31.7	18.5	40.8
Green Ext Time (p_c), s	0.0	3.1	0.1	4.1	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

ATTACHMENT F: E+P PHASE 4 HCM WORKSHEETS

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	18	0	1	0	988	55	5	1199	0
Future Vol, veh/h	0	0	0	18	0	1	0	988	55	5	1199	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	20	0	1	0	1074	60	5	1303	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2417	2417	1104	-	0	0	1134	0	0
Stage 1	1104	1104	-	-	-	-	-	-	-
Stage 2	1313	1313	-	-	-	-	-	-	-
Critical Hdwy	5.4	5.4	5.4	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	71	69	331	0	-	-	623	-	0
Stage 1	320	289	-	0	-	-	-	-	0
Stage 2	254	230	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	70	0	331	-	-	-	623	-	-
Mov Cap-2 Maneuver	160	0	-	-	-	-	-	-	-
Stage 1	320	0	-	-	-	-	-	-	-
Stage 2	252	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	164	623	-
HCM Lane V/C Ratio	-	-	0.126	0.009	-
HCM Control Delay (s)	-	-	30.1	10.8	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	0	0	0	3	1043	0	0	1217	0
Future Vol, veh/h	0	0	1	0	0	0	3	1043	0	0	1217	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	1	0	0	0	3	1159	0	0	1352	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2517	2517	1352	2518	2517	1159	1352	0	0	1159	0	0
Stage 1	1352	1352	-	1165	1165	-	-	-	-	-	-	-
Stage 2	1165	1165	-	1353	1352	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	19	28	185	19	28	241	516	-	-	610	-	-
Stage 1	187	220	-	239	271	-	-	-	-	-	-	-
Stage 2	239	271	-	187	220	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	19	28	185	19	28	241	516	-	-	610	-	-
Mov Cap-2 Maneuver	19	28	-	19	28	-	-	-	-	-	-	-
Stage 1	184	220	-	235	267	-	-	-	-	-	-	-
Stage 2	235	267	-	186	220	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.6	0	0	0
HCM LOS	C	A		

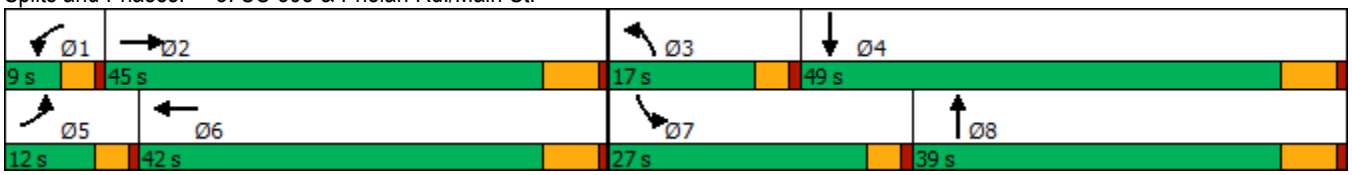
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	516	-	-	185	-	610	-	-
HCM Lane V/C Ratio	0.006	-	-	0.006	-	-	-	-
HCM Control Delay (s)	12	0	-	24.6	0	0	-	-
HCM Lane LOS	B	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	51	665	4	324	93	728	225	960
Future Volume (vph)	51	665	4	324	93	728	225	960
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	17.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	12.0	45.0	9.0	42.0	17.0	39.0	27.0	49.0
Total Split (%)	10.0%	37.5%	7.5%	35.0%	14.2%	32.5%	22.5%	40.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 94.4
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	665	108	4	324	267	93	728	9	225	960	33
Future Volume (veh/h)	51	665	108	4	324	267	93	728	9	225	960	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	53	686	67	4	334	196	96	751	9	232	990	30
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	72	880	86	9	503	289	120	977	12	273	1276	39
Arrive On Green	0.04	0.28	0.28	0.01	0.24	0.24	0.07	0.28	0.28	0.17	0.38	0.38
Sat Flow, veh/h	1619	3148	307	1619	2091	1202	1619	3461	41	1619	3389	103
Grp Volume(v), veh/h	53	372	381	4	272	258	96	371	389	232	500	520
Grp Sat Flow(s),veh/h/ln	1619	1710	1745	1619	1710	1584	1619	1710	1793	1619	1710	1782
Q Serve(g_s), s	2.4	15.2	15.2	0.2	10.9	11.2	4.4	15.0	15.0	10.5	19.5	19.5
Cycle Q Clear(g_c), s	2.4	15.2	15.2	0.2	10.9	11.2	4.4	15.0	15.0	10.5	19.5	19.5
Prop In Lane	1.00		0.18	1.00		0.76	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	72	478	488	9	411	381	120	483	506	273	644	671
V/C Ratio(X)	0.74	0.78	0.78	0.46	0.66	0.68	0.80	0.77	0.77	0.85	0.78	0.78
Avail Cap(c_a), veh/h	171	882	899	107	814	754	278	746	782	492	972	1013
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	25.1	25.1	37.5	25.9	26.1	34.5	24.9	24.9	30.5	20.8	20.8
Incr Delay (d2), s/veh	10.4	2.8	2.8	26.1	1.8	2.1	8.7	3.1	3.0	5.6	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	5.7	5.8	0.1	4.1	3.9	1.9	5.7	5.9	4.1	6.9	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	27.9	27.9	63.6	27.8	28.2	43.1	28.0	27.9	36.1	23.4	23.3
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		806			534			856			1252	
Approach Delay, s/veh		29.1			28.2			29.6			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	27.1	9.6	34.5	7.4	24.2	16.7	27.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	39.0	13.0	43.0	8.0	36.0	23.0	33.0
Max Q Clear Time (g_c+I1), s	2.2	17.2	6.4	21.5	4.4	13.2	12.5	17.0
Green Ext Time (p_c), s	0.0	3.9	0.1	7.0	0.0	2.7	0.3	4.3

Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	54	0	5	0	1407	20	2	1030	0
Future Vol, veh/h	0	0	0	54	0	5	0	1407	20	2	1030	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	59	0	5	0	1529	22	2	1120	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2664	2664	1540	-	0	0	1551	0	0
Stage 1	1540	1540	-	-	-	-	-	-	-
Stage 2	1124	1124	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	71	69	240	0	-	-	433	-	0
Stage 1	197	179	-	0	-	-	-	-	0
Stage 2	313	283	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	71	0	240	-	-	-	433	-	-
Mov Cap-2 Maneuver	140	0	-	-	-	-	-	-	-
Stage 1	197	0	-	-	-	-	-	-	-
Stage 2	311	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.2	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	145	433	-
HCM Lane V/C Ratio	-	-	0.442	0.005	-
HCM Control Delay (s)	-	-	48.2	13.4	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	2	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	4	0	0	0	8	1424	0	0	1080	4
Future Vol, veh/h	3	0	4	0	0	0	8	1424	0	0	1080	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	4	0	0	0	8	1483	0	0	1125	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2627	2627	1128	2628	2629	1483	1130	0	0	1483	0	0
Stage 1	1128	1128	-	1499	1499	-	-	-	-	-	-	-
Stage 2	1499	1499	-	1129	1130	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	16	24	251	16	24	155	626	-	-	460	-	-
Stage 1	250	282	-	154	187	-	-	-	-	-	-	-
Stage 2	154	187	-	250	281	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	15	22	251	15	22	155	625	-	-	460	-	-
Mov Cap-2 Maneuver	15	22	-	15	22	-	-	-	-	-	-	-
Stage 1	232	282	-	143	173	-	-	-	-	-	-	-
Stage 2	143	173	-	246	281	-	-	-	-	-	-	-

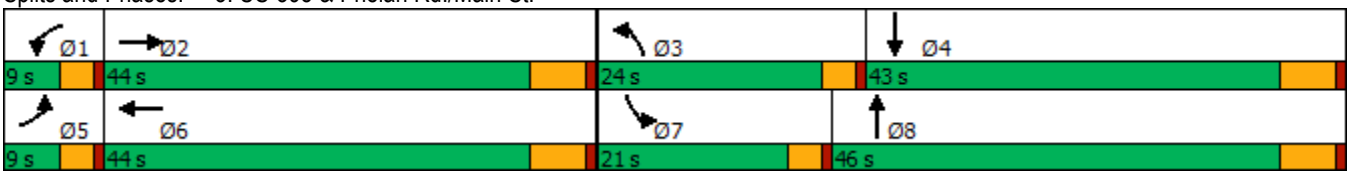
Approach	EB	WB	NB	SB
HCM Control Delay, s	148	0	0.1	0
HCM LOS	F	A		

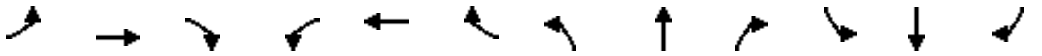
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	625	-	-	32	-	460	-	-
HCM Lane V/C Ratio	0.013	-	-	0.228	-	-	-	-
HCM Control Delay (s)	10.8	0	-	148	0	0	-	-
HCM Lane LOS	B	A	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	568	9	668	165	1110	235	800
Future Volume (vph)	46	568	9	668	165	1110	235	800
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	16.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	9.0	44.0	9.0	44.0	24.0	46.0	21.0	43.0
Total Split (%)	7.5%	36.7%	7.5%	36.7%	20.0%	38.3%	17.5%	35.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 116.7
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	568	69	9	668	276	165	1110	26	235	800	51
Future Volume (veh/h)	46	568	69	9	668	276	165	1110	26	235	800	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	48	598	45	9	703	207	174	1168	20	247	842	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	1045	79	18	778	229	200	1188	20	238	1226	57
Arrive On Green	0.04	0.32	0.32	0.01	0.30	0.30	0.12	0.35	0.35	0.15	0.37	0.37
Sat Flow, veh/h	1619	3221	242	1619	2605	767	1619	3440	59	1619	3328	154
Grp Volume(v), veh/h	48	317	326	9	461	449	174	580	608	247	433	448
Grp Sat Flow(s),veh/h/ln	1619	1710	1753	1619	1710	1662	1619	1710	1789	1619	1710	1772
Q Serve(g_s), s	3.4	17.8	17.9	0.6	30.0	30.0	12.2	39.0	39.0	17.0	24.8	24.8
Cycle Q Clear(g_c), s	3.4	17.8	17.9	0.6	30.0	30.0	12.2	39.0	39.0	17.0	24.8	24.8
Prop In Lane	1.00		0.14	1.00		0.46	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	59	555	569	18	510	496	200	590	618	238	630	653
V/C Ratio(X)	0.81	0.57	0.57	0.51	0.90	0.90	0.87	0.98	0.98	1.04	0.69	0.69
Avail Cap(c_a), veh/h	70	561	575	70	561	545	280	590	618	238	630	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	32.5	32.5	57.0	39.0	39.0	49.8	37.6	37.6	49.4	30.9	30.9
Incr Delay (d2), s/veh	40.8	1.4	1.4	16.1	17.1	17.6	17.0	32.6	31.9	69.1	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.1	7.3	0.3	14.2	13.8	5.7	20.3	21.2	11.1	10.0	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.2	33.8	33.8	73.1	56.2	56.6	66.8	70.2	69.5	118.5	34.2	34.1
LnGrp LOS	F	C	C	E	E	E	E	E	E	F	C	C
Approach Vol, veh/h		691			919			1362			1128	
Approach Delay, s/veh		38.2			56.5			69.4			52.6	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	43.6	18.3	48.7	8.3	40.6	21.0	46.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	38.0	20.0	37.0	5.0	38.0	17.0	40.0
Max Q Clear Time (g_c+I1), s	2.6	19.9	14.2	26.8	5.4	32.0	19.0	41.0
Green Ext Time (p_c), s	0.0	3.1	0.1	4.0	0.0	2.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	56.7
HCM 6th LOS	E

ATTACHMENT G: HORIZON YEAR (2040) WITH PROJECT HCM WORKSHEETS

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	1910	5	2741
Future Volume (vph)	0	1910	5	2741
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	23.5	9.6	16.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min
Act Effct Green (s)	12.3	99.1	5.0	100.9
Actuated g/C Ratio	0.11	0.86	0.04	0.87
v/c Ratio	0.08	1.32	0.07	1.79
Control Delay	0.6	161.7	57.4	376.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	0.6	161.7	57.4	376.4
LOS	A	F	E	F
Approach Delay	0.6	161.7		375.8
Approach LOS	A	F		F

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 115.4			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.79			
Intersection Signal Delay: 285.3		Intersection LOS: F	
Intersection Capacity Utilization 161.8%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: US-395 & Avenal St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	0	1	0	1910	55	5	2741	0
Future Volume (veh/h)	0	0	0	18	0	1	0	1910	55	5	2741	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1900	1900	0	1900	1900	1800	1900	0
Adj Flow Rate, veh/h				20	0	1	0	2076	60	5	2979	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				75	0	4	0	1463	42	11	1611	0
Arrive On Green				0.04	0.00	0.04	0.00	0.80	0.80	0.01	0.85	0.00
Sat Flow, veh/h				1713	0	86	0	1837	53	1714	1900	0
Grp Volume(v), veh/h				21	0	0	0	0	2136	5	2979	0
Grp Sat Flow(s),veh/h/ln				1799	0	0	0	0	1890	1714	1900	0
Q Serve(g_s), s				1.2	0.0	0.0	0.0	0.0	81.6	0.3	86.9	0.0
Cycle Q Clear(g_c), s				1.2	0.0	0.0	0.0	0.0	81.6	0.3	86.9	0.0
Prop In Lane				0.95		0.05	0.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h				79	0	0	0	0	1506	11	1611	0
V/C Ratio(X)				0.27	0.00	0.00	0.00	0.00	1.42	0.45	1.85	0.00
Avail Cap(c_a), veh/h				386	0	0	0	0	1506	84	1611	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				47.4	0.0	0.0	0.0	0.0	10.4	50.7	7.8	0.0
Incr Delay (d2), s/veh				1.8	0.0	0.0	0.0	0.0	192.4	10.3	384.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.0	0.0	0.0	93.8	0.2	175.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				49.2	0.0	0.0	0.0	0.0	202.8	61.0	392.4	0.0
LnGrp LOS				D	A	A	A	A	F	E	F	A
Approach Vol, veh/h					21			2136			2984	
Approach Delay, s/veh					49.2			202.8			391.9	
Approach LOS					D			F			F	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	5.3	88.1				93.4		9.1				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.3	83.6				88.9		3.2				
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		311.9
HCM 6th LOS		F

Intersection	
Int Delay, s/veh	70.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	0	74	0	0	0	325	1946	0	0	2648	111
Future Vol, veh/h	19	0	74	0	0	0	325	1946	0	0	2648	111
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	21	0	82	0	0	0	361	2162	0	0	2942	123

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	5888	5888	3004	5929	5949	2162	3065	0	0	2162	0	0
Stage 1	3004	3004	-	2884	2884	-	-	-	-	-	-	-
Stage 2	2884	2884	-	3045	3065	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	0	0	~ 18	0	0	61	~ 110	-	-	251	-	-
Stage 1	~ 20	32	-	23	37	-	-	-	-	-	-	-
Stage 2	23	37	-	18	29	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	~ 18	-	0	61	~ 110	-	-	251	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 20	32	-	23	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	29	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		0	158.9	0
HCM LOS	-	A		

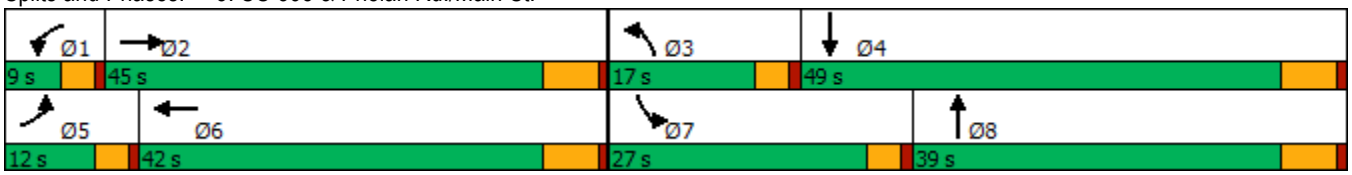
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 110	-	-	-	-	251	-	-
HCM Lane V/C Ratio	3.283	-	-	-	-	-	-	-
HCM Control Delay (s)	$ 1110.1	0	-	-	0	0	-	-
HCM Lane LOS	F	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	35.2	-	-	-	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	100	1030	23	1203	237	1564	362	2281
Future Volume (vph)	100	1030	23	1203	237	1564	362	2281
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	17.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	12.0	45.0	9.0	42.0	17.0	39.0	27.0	49.0
Total Split (%)	10.0%	37.5%	7.5%	35.0%	14.2%	32.5%	22.5%	40.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	8.0	42.6	5.0	36.0	13.0	33.0	23.0	43.0
Actuated g/C Ratio	0.07	0.36	0.04	0.30	0.11	0.28	0.19	0.36
v/c Ratio	0.96	1.08	0.36	1.82	1.40	1.75	1.21	2.00
Control Delay	133.7	86.0	70.8	398.1	251.3	368.8	161.5	475.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	133.7	86.0	70.8	398.1	251.3	368.8	161.5	475.4
LOS	F	F	E	F	F	F	F	F
Approach Delay		89.6		394.0		353.6		433.7
Approach LOS		F		F		F		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.00	
Intersection Signal Delay: 345.4	Intersection LOS: F
Intersection Capacity Utilization 162.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1030	218	23	1203	607	237	1564	26	362	2281	81
Future Volume (veh/h)	100	1030	218	23	1203	607	237	1564	26	362	2281	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	103	1062	181	24	1240	547	244	1612	27	373	2352	80
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	108	1005	171	37	705	295	175	947	16	310	1209	41
Arrive On Green	0.07	0.34	0.34	0.02	0.30	0.30	0.11	0.28	0.28	0.19	0.36	0.36
Sat Flow, veh/h	1619	2923	497	1619	2349	984	1619	3442	58	1619	3375	114
Grp Volume(v), veh/h	103	620	623	24	885	902	244	800	839	373	1185	1247
Grp Sat Flow(s),veh/h/ln	1619	1710	1711	1619	1710	1623	1619	1710	1790	1619	1710	1779
Q Serve(g_s), s	7.6	41.2	41.2	1.8	36.0	36.0	13.0	33.0	33.0	23.0	43.0	43.0
Cycle Q Clear(g_c), s	7.6	41.2	41.2	1.8	36.0	36.0	13.0	33.0	33.0	23.0	43.0	43.0
Prop In Lane	1.00		0.29	1.00		0.61	1.00		0.03	1.00		0.06
Lane Grp Cap(c), veh/h	108	588	588	37	513	487	175	470	492	310	613	638
V/C Ratio(X)	0.95	1.06	1.06	0.65	1.73	1.85	1.39	1.70	1.71	1.20	1.93	1.96
Avail Cap(c_a), veh/h	108	588	588	67	513	487	175	470	492	310	613	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	39.4	39.4	58.1	42.0	42.0	53.5	43.5	43.5	48.5	38.5	38.5
Incr Delay (d2), s/veh	71.7	52.5	53.8	13.1	334.4	391.6	207.0	324.3	326.0	117.6	426.1	435.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	24.6	24.8	0.8	61.8	66.4	15.1	55.4	58.2	18.9	89.1	94.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	127.5	91.9	93.2	71.2	376.4	433.6	260.5	367.8	369.5	166.1	464.6	474.4
LnGrp LOS	F	F	F	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h		1346			1811			1883			2805	
Approach Delay, s/veh		95.2			400.9			354.7			429.3	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	47.2	17.0	49.0	12.0	42.0	27.0	39.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	39.0	13.0	43.0	8.0	36.0	23.0	33.0
Max Q Clear Time (g_c+I1), s	3.8	43.2	15.0	45.0	9.6	38.0	25.0	35.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	347.5
HCM 6th LOS	F

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	2887	2	1955
Future Volume (vph)	0	2887	2	1955
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	23.5	9.6	16.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min
Act Effct Green (s)	12.4	96.4	5.0	98.3
Actuated g/C Ratio	0.11	0.82	0.04	0.84
v/c Ratio	0.25	2.02	0.03	1.33
Control Delay	10.4	480.4	56.0	171.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	10.4	480.4	56.0	171.5
LOS	B	F	E	F
Approach Delay	10.4	480.4		171.4
Approach LOS	B	F		F

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 117.2			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 2.02			
Intersection Signal Delay: 352.0		Intersection LOS: F	
Intersection Capacity Utilization 170.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: US-395 & Avenal St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	54	0	5	0	2887	20	2	1955	0
Future Volume (veh/h)	0	0	0	54	0	5	0	2887	20	2	1955	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1900	1900	0	1900	1900	1800	1900	0
Adj Flow Rate, veh/h				59	0	5	0	3138	22	2	2125	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				132	0	11	0	1451	10	5	1550	0
Arrive On Green				0.08	0.00	0.08	0.00	0.77	0.77	0.00	0.82	0.00
Sat Flow, veh/h				1652	0	140	0	1884	13	1714	1900	0
Grp Volume(v), veh/h				64	0	0	0	0	3160	2	2125	0
Grp Sat Flow(s),veh/h/ln				1792	0	0	0	0	1898	1714	1900	0
Q Serve(g_s), s				3.6	0.0	0.0	0.0	0.0	82.0	0.1	86.9	0.0
Cycle Q Clear(g_c), s				3.6	0.0	0.0	0.0	0.0	82.0	0.1	86.9	0.0
Prop In Lane				0.92		0.08	0.00		0.01	1.00		0.00
Lane Grp Cap(c), veh/h				143	0	0	0	0	1461	5	1550	0
V/C Ratio(X)				0.45	0.00	0.00	0.00	0.00	2.16	0.43	1.37	0.00
Avail Cap(c_a), veh/h				370	0	0	0	0	1461	80	1550	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				46.8	0.0	0.0	0.0	0.0	12.2	53.0	9.8	0.0
Incr Delay (d2), s/veh				2.2	0.0	0.0	0.0	0.0	525.3	21.9	171.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	0.0	0.0	0.0	231.1	0.1	85.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				48.9	0.0	0.0	0.0	0.0	537.6	74.9	180.8	0.0
LnGrp LOS				D	A	A	A	A	F	E	F	A
Approach Vol, veh/h					64			3160			2127	
Approach Delay, s/veh					48.9			537.6			180.7	
Approach LOS					D			F			F	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.9	88.5				93.4		13.1				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.1	84.0				88.9		5.6				
Green Ext Time (p_c), s	0.0	0.0				0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		389.9
HCM 6th LOS		F

Intersection	
Int Delay, s/veh	320.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	111	0	415	0	0	0	74	2797	0	0	1980	29
Future Vol, veh/h	111	0	415	0	0	0	74	2797	0	0	1980	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	116	0	432	0	0	0	77	2914	0	0	2063	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	5147	5147	2079	5362	5162	2914	2094	0	0	2914	0	0
Stage 1	2079	2079	-	3068	3068	-	-	-	-	-	-	-
Stage 2	3068	3068	-	2294	2094	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	0	0	~ 68	0	0	21	267	-	-	127	-	-
Stage 1	~ 71	96	-	18	29	-	-	-	-	-	-	-
Stage 2	~ 18	29	-	53	95	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	0	0	~ 68	-	0	21	267	-	-	127	-	-
Mov Cap-2 Maneuver	0	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 71	96	-	18	29	-	-	-	-	-	-	-
Stage 2	~ 18	29	-	-	95	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $s	3293.2	0	0.6	0
HCM LOS	F	A		

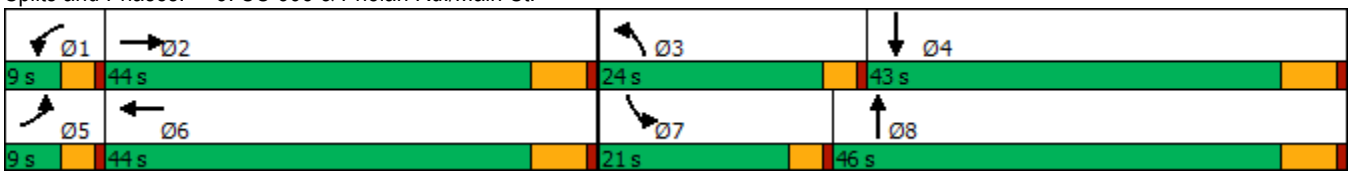
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	267	-	-	68	-	127	-	-
HCM Lane V/C Ratio	0.289	-	-	8.058	-	-	-	-
HCM Control Delay (s)	23.9	0	-	$ 3293.2	0	0	-	-
HCM Lane LOS	C	A	-	F	A	A	-	-
HCM 95th %tile Q(veh)	1.2	-	-	63.2	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	97	1399	27	1077	296	2385	665	1628
Future Volume (vph)	97	1399	27	1077	296	2385	665	1628
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	16.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	9.0	44.0	9.0	44.0	24.0	46.0	21.0	43.0
Total Split (%)	7.5%	36.7%	7.5%	36.7%	20.0%	38.3%	17.5%	35.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.0	41.6	5.0	38.0	20.0	40.0	17.0	37.0
Actuated g/C Ratio	0.04	0.35	0.04	0.32	0.17	0.33	0.14	0.31
v/c Ratio	1.52	1.45	0.42	1.44	1.16	2.63	3.07	1.74
Control Delay	335.4	238.1	74.8	236.1	149.6	754.8	961.8	365.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	335.4	238.1	74.8	236.1	149.6	754.8	961.8	365.6
LOS	F	F	E	F	F	F	F	F
Approach Delay		243.6		233.2		697.0		530.8
Approach LOS		F		F		F		F

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 3.07		
Intersection Signal Delay: 482.8	Intersection LOS: F	
Intersection Capacity Utilization 193.7%	ICU Level of Service H	
Analysis Period (min) 15		

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1399	210	27	1077	388	296	2385	423	665	1628	106
Future Volume (veh/h)	97	1399	210	27	1077	388	296	2385	423	665	1628	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	102	1473	193	28	1134	324	312	2511	438	700	1714	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	67	1012	131	41	834	235	270	975	165	229	1015	57
Arrive On Green	0.04	0.33	0.33	0.03	0.32	0.32	0.17	0.33	0.33	0.14	0.31	0.31
Sat Flow, veh/h	1619	3040	393	1619	2633	743	1619	2925	495	1619	3292	185
Grp Volume(v), veh/h	102	821	845	28	732	726	312	1437	1512	700	884	927
Grp Sat Flow(s),veh/h/ln	1619	1710	1723	1619	1710	1666	1619	1710	1711	1619	1710	1767
Q Serve(g_s), s	5.0	40.0	40.0	2.1	38.0	38.0	20.0	40.0	40.0	17.0	37.0	37.0
Cycle Q Clear(g_c), s	5.0	40.0	40.0	2.1	38.0	38.0	20.0	40.0	40.0	17.0	37.0	37.0
Prop In Lane	1.00		0.23	1.00		0.45	1.00		0.29	1.00		0.10
Lane Grp Cap(c), veh/h	67	570	574	41	542	528	270	570	570	229	527	545
V/C Ratio(X)	1.51	1.44	1.47	0.68	1.35	1.38	1.16	2.52	2.65	3.05	1.68	1.70
Avail Cap(c_a), veh/h	67	570	574	67	542	528	270	570	570	229	527	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	40.0	40.0	58.0	41.0	41.0	50.0	40.0	40.0	51.5	41.5	41.5
Incr Delay (d2), s/veh	292.5	208.3	222.2	13.9	169.9	181.1	103.8	689.4	748.4	934.9	313.1	323.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	48.5	51.1	1.0	40.4	41.0	15.5	124.7	134.1	66.1	60.4	63.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	350.0	248.3	262.2	71.9	210.9	222.1	153.8	729.4	788.4	986.4	354.6	364.7
LnGrp LOS	F	F	F	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h		1768			1486			3261			2511	
Approach Delay, s/veh		260.8			213.8			701.7			534.5	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	46.0	24.0	43.0	9.0	44.0	21.0	46.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	38.0	20.0	37.0	5.0	38.0	17.0	40.0
Max Q Clear Time (g_c+I1), s	4.1	42.0	22.0	39.0	7.0	40.0	19.0	42.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	488.5
HCM 6th LOS	F

ATTACHMENT H: HCM WORKSHEETS WITH IMPROVEMENTS

E+P PHASE 2

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	988	2	1199
Future Volume (vph)	0	988	2	1199
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	28.5	9.6	24.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 99.6
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: US-395 & Avenal St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	7	0	1	0	988	26	2	1199	0
Future Volume (veh/h)	0	0	0	7	0	1	0	988	26	2	1199	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	0	1800	1800	1700	1800	0
Adj Flow Rate, veh/h				8	0	1	0	1074	28	2	1303	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				35	0	4	0	1277	33	4	1449	0
Arrive On Green				0.02	0.00	0.02	0.00	0.73	0.73	0.00	0.81	0.00
Sat Flow, veh/h				1503	0	188	0	1746	46	1619	1800	0
Grp Volume(v), veh/h				9	0	0	0	0	1102	2	1303	0
Grp Sat Flow(s),veh/h/ln				1691	0	0	0	0	1792	1619	1800	0
Q Serve(g_s), s				0.3	0.0	0.0	0.0	0.0	27.7	0.1	33.0	0.0
Cycle Q Clear(g_c), s				0.3	0.0	0.0	0.0	0.0	27.7	0.1	33.0	0.0
Prop In Lane				0.89		0.11	0.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h				39	0	0	0	0	1310	4	1449	0
V/C Ratio(X)				0.23	0.00	0.00	0.00	0.00	0.84	0.45	0.90	0.00
Avail Cap(c_a), veh/h				576	0	0	0	0	2144	125	2421	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				31.0	0.0	0.0	0.0	0.0	6.1	32.2	4.4	0.0
Incr Delay (d2), s/veh				3.0	0.0	0.0	0.0	0.0	1.7	24.6	2.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.2	0.0	0.0	0.0	0.0	2.9	0.1	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.0	0.0	0.0	0.0	0.0	7.8	56.8	7.3	0.0
LnGrp LOS				C	A	A	A	A	A	E	A	A
Approach Vol, veh/h					9			1102			1305	
Approach Delay, s/veh					34.0			7.8			7.4	
Approach LOS					C			A			A	

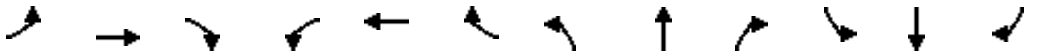
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.8	53.7				58.5		6.1				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.1	29.7				35.0		2.3				
Green Ext Time (p_c), s	0.0	10.8				17.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		7.7
HCM 6th LOS		A

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	1407	1	1030
Future Volume (vph)	0	1407	1	1030
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	24.5	9.6	24.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 108.9
Natural Cycle: 120
Control Type: Actuated-Uncoo dinated

Splits and Phases: 1: US-395 & Avenal St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	25	0	2	0	1407	9	1	1030	0
Future Volume (veh/h)	0	0	0	25	0	2	0	1407	9	1	1030	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	0	1800	1800	1700	1800	0
Adj Flow Rate, veh/h				27	0	2	0	1529	10	1	1120	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				88	0	7	0	1400	9	2	1497	0
Arrive On Green				0.06	0.00	0.06	0.00	0.78	0.78	0.00	0.83	0.00
Sat Flow, veh/h				1583	0	117	0	1786	12	1619	1800	0
Grp Volume(v), veh/h				29	0	0	0	0	1539	1	1120	0
Grp Sat Flow(s),veh/h/ln				1700	0	0	0	0	1798	1619	1800	0
Q Serve(g_s), s				1.6	0.0	0.0	0.0	0.0	77.3	0.1	27.3	0.0
Cycle Q Clear(g_c), s				1.6	0.0	0.0	0.0	0.0	77.3	0.1	27.3	0.0
Prop In Lane				0.93		0.07	0.00		0.01	1.00		0.00
Lane Grp Cap(c), veh/h				94	0	0	0	0	1409	2	1497	0
V/C Ratio(X)				0.31	0.00	0.00	0.00	0.00	1.09	0.45	0.75	0.00
Avail Cap(c_a), veh/h				379	0	0	0	0	1409	82	1586	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				44.7	0.0	0.0	0.0	0.0	10.7	49.2	3.7	0.0
Incr Delay (d2), s/veh				1.8	0.0	0.0	0.0	0.0	53.2	45.2	1.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	0.0	0.0	0.0	33.4	0.1	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.6	0.0	0.0	0.0	0.0	63.9	94.4	5.6	0.0
LnGrp LOS				D	A	A	A	A	F	F	A	A
Approach Vol, veh/h					29			1539			1121	
Approach Delay, s/veh					46.6			63.9			5.7	
Approach LOS					D			E			A	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.7	83.8				88.5		10.1				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.1	79.3				29.3		3.6				
Green Ext Time (p_c), s	0.0	0.0				11.4		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		39.4
HCM 6th LOS		D

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	7	0	1	0	988	26	2	1199	0
Future Vol, veh/h	0	0	0	7	0	1	0	988	26	2	1199	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	8	0	1	0	1074	28	2	1303	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	1744	2395	551	-	0	0	1102	0	0
Stage 1	1088	1088	-	-	-	-	-	-	-
Stage 2	656	1307	-	-	-	-	-	-	-
Critical Hdwy	5.4	5.4	5.4	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	156	71	608	0	-	-	641	-	0
Stage 1	289	294	-	0	-	-	-	-	0
Stage 2	483	232	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	156	0	608	-	-	-	641	-	-
Mov Cap-2 Maneuver	229	0	-	-	-	-	-	-	-
Stage 1	289	0	-	-	-	-	-	-	-
Stage 2	482	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	248	641	-
HCM Lane V/C Ratio	-	-	0.035	0.003	-
HCM Control Delay (s)	-	-	20	10.6	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	0	2	0	1407	9	1	1030	0
Future Vol, veh/h	0	0	0	25	0	2	0	1407	9	1	1030	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	27	0	2	0	1529	10	1	1120	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	2096	2656	770	-	0	0	1539	0	0
Stage 1	1534	1534	-	-	-	-	-	-	-
Stage 2	562	1122	-	-	-	-	-	-	-
Critical Hdwy	5.5	5.5	5.5	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	98	48	469	0	-	-	438	-	0
Stage 1	167	180	-	0	-	-	-	-	0
Stage 2	540	284	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	98	0	469	-	-	-	438	-	-
Mov Cap-2 Maneuver	144	0	-	-	-	-	-	-	-
Stage 1	167	0	-	-	-	-	-	-	-
Stage 2	539	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.3	0	0
HCM LOS	D		

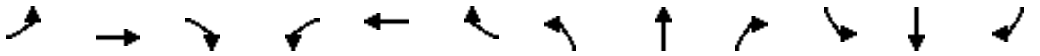
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	152	438	-
HCM Lane V/C Ratio	-	-	0.193	0.002	-
HCM Control Delay (s)	-	-	34.3	13.2	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

E+P PHASE 3

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	988	3	1199
Future Volume (vph)	0	988	3	1199
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	28.5	9.6	24.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 99.6
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: US-395 & Avenal St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	11	0	1	0	988	37	3	1199	0
Future Volume (veh/h)	0	0	0	11	0	1	0	988	37	3	1199	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	0	1800	1800	1700	1800	0
Adj Flow Rate, veh/h				12	0	1	0	1074	40	3	1303	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				50	0	4	0	1257	47	7	1443	0
Arrive On Green				0.03	0.00	0.03	0.00	0.73	0.73	0.00	0.80	0.00
Sat Flow, veh/h				1567	0	131	0	1724	64	1619	1800	0
Grp Volume(v), veh/h				13	0	0	0	0	1114	3	1303	0
Grp Sat Flow(s),veh/h/ln				1698	0	0	0	0	1788	1619	1800	0
Q Serve(g_s), s				0.5	0.0	0.0	0.0	0.0	29.9	0.1	34.7	0.0
Cycle Q Clear(g_c), s				0.5	0.0	0.0	0.0	0.0	29.9	0.1	34.7	0.0
Prop In Lane				0.92		0.08	0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h				54	0	0	0	0	1304	7	1443	0
V/C Ratio(X)				0.24	0.00	0.00	0.00	0.00	0.85	0.46	0.90	0.00
Avail Cap(c_a), veh/h				559	0	0	0	0	2069	121	2341	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				31.5	0.0	0.0	0.0	0.0	6.5	33.2	4.8	0.0
Incr Delay (d2), s/veh				2.2	0.0	0.0	0.0	0.0	2.2	17.3	3.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.2	0.0	0.0	0.0	0.0	3.8	0.1	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.8	0.0	0.0	0.0	0.0	8.7	50.5	8.0	0.0
LnGrp LOS				C	A	A	A	A	A	D	A	A
Approach Vol, veh/h					13			1114			1306	
Approach Delay, s/veh					33.8			8.7			8.1	
Approach LOS					C			A			A	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.9	55.2				60.1		6.7				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.1	31.9				36.7		2.5				
Green Ext Time (p_c), s	0.0	11.0				16.9		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		8.5
HCM 6th LOS		A

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	1407	1	1030
Future Volume (vph)	0	1407	1	1030
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	24.5	9.6	24.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 108.9
Natural Cycle: 120
Control Type: Actuated-Uncoo dinated

Splits and Phases: 1: US-395 & Avenal St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	36	0	3	0	1407	13	1	1030	0
Future Volume (veh/h)	0	0	0	36	0	3	0	1407	13	1	1030	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	0	1800	1800	1700	1800	0
Adj Flow Rate, veh/h				39	0	3	0	1529	14	1	1120	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				109	0	8	0	1376	13	2	1476	0
Arrive On Green				0.07	0.00	0.07	0.00	0.77	0.77	0.00	0.82	0.00
Sat Flow, veh/h				1578	0	121	0	1781	16	1619	1800	0
Grp Volume(v), veh/h				42	0	0	0	0	1543	1	1120	0
Grp Sat Flow(s),veh/h/ln				1699	0	0	0	0	1797	1619	1800	0
Q Serve(g_s), s				2.4	0.0	0.0	0.0	0.0	77.3	0.1	29.6	0.0
Cycle Q Clear(g_c), s				2.4	0.0	0.0	0.0	0.0	77.3	0.1	29.6	0.0
Prop In Lane				0.93		0.07	0.00		0.01	1.00		0.00
Lane Grp Cap(c), veh/h				117	0	0	0	0	1389	2	1476	0
V/C Ratio(X)				0.36	0.00	0.00	0.00	0.00	1.11	0.45	0.76	0.00
Avail Cap(c_a), veh/h				374	0	0	0	0	1389	81	1564	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				44.5	0.0	0.0	0.0	0.0	11.4	49.9	4.3	0.0
Incr Delay (d2), s/veh				1.8	0.0	0.0	0.0	0.0	60.6	45.2	2.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	0.0	0.0	0.0	37.6	0.1	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.3	0.0	0.0	0.0	0.0	72.0	95.1	6.4	0.0
LnGrp LOS				D	A	A	A	A	F	F	A	A
Approach Vol, veh/h					42			1543			1121	
Approach Delay, s/veh					46.3			72.0			6.4	
Approach LOS					D			E			A	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.7	83.8				88.5		11.5				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.1	79.3				31.6		4.4				
Green Ext Time (p_c), s	0.0	0.0				11.4		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		44.5
HCM 6th LOS		D

E+P PHASE 4

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	988	5	1199
Future Volume (vph)	0	988	5	1199
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	28.5	9.6	24.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 106.2
Natural Cycle: 120
Control Type: Actuated-Uncoo dinated

Splits and Phases: 1: US-395 & Avenal St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	0	1	0	988	55	5	1199	0
Future Volume (veh/h)	0	0	0	18	0	1	0	988	55	5	1199	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	0	1800	1800	1700	1800	0
Adj Flow Rate, veh/h				20	0	1	0	1074	60	5	1303	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				78	0	4	0	1224	68	11	1433	0
Arrive On Green				0.05	0.00	0.05	0.00	0.72	0.72	0.01	0.80	0.00
Sat Flow, veh/h				1623	0	81	0	1689	94	1619	1800	0
Grp Volume(v), veh/h				21	0	0	0	0	1134	5	1303	0
Grp Sat Flow(s),veh/h/ln				1704	0	0	0	0	1783	1619	1800	0
Q Serve(g_s), s				0.8	0.0	0.0	0.0	0.0	34.2	0.2	38.0	0.0
Cycle Q Clear(g_c), s				0.8	0.0	0.0	0.0	0.0	34.2	0.2	38.0	0.0
Prop In Lane				0.95		0.05	0.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h				81	0	0	0	0	1292	11	1433	0
V/C Ratio(X)				0.26	0.00	0.00	0.00	0.00	0.88	0.47	0.91	0.00
Avail Cap(c_a), veh/h				528	0	0	0	0	1941	114	2202	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				32.6	0.0	0.0	0.0	0.0	7.4	35.2	5.4	0.0
Incr Delay (d2), s/veh				1.7	0.0	0.0	0.0	0.0	3.3	11.3	4.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.4	0.0	0.0	0.0	0.0	5.6	0.1	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.3	0.0	0.0	0.0	0.0	10.7	46.4	9.5	0.0
LnGrp LOS				C	A	A	A	A	B	D	A	A
Approach Vol, veh/h					21			1134			1308	
Approach Delay, s/veh					34.3			10.7			9.6	
Approach LOS					C			B			A	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	5.1	58.0				63.0		8.0				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.2	36.2				40.0		2.8				
Green Ext Time (p_c), s	0.0	11.3				16.5		0.0				

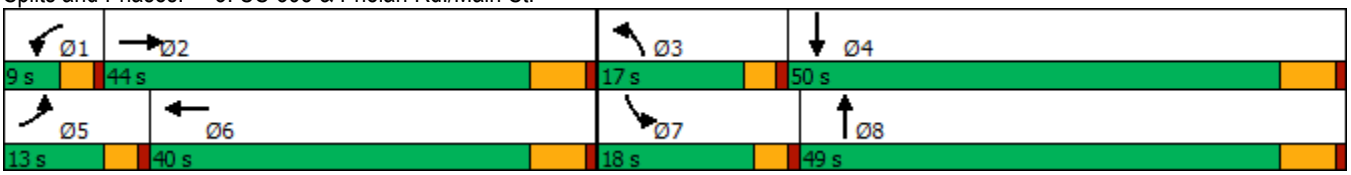
Intersection Summary		
HCM 6th Ctrl Delay		10.3
HCM 6th LOS		B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	51	665	4	324	93	728	225	960
Future Volume (vph)	51	665	4	324	93	728	225	960
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	17.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	13.0	44.0	9.0	40.0	17.0	49.0	18.0	50.0
Total Split (%)	10.8%	36.7%	7.5%	33.3%	14.2%	40.8%	15.0%	41.7%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 93.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	665	108	4	324	267	93	728	9	225	960	33
Future Volume (veh/h)	51	665	108	4	324	267	93	728	9	225	960	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	53	686	67	4	334	196	96	751	9	232	990	30
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	72	878	86	9	502	288	120	1213	15	318	1279	39
Arrive On Green	0.04	0.28	0.28	0.01	0.24	0.24	0.07	0.35	0.35	0.10	0.38	0.38
Sat Flow, veh/h	1619	3148	307	1619	2091	1202	1619	3461	41	3141	3389	103
Grp Volume(v), veh/h	53	372	381	4	272	258	96	371	389	232	500	520
Grp Sat Flow(s),veh/h/ln	1619	1710	1745	1619	1710	1584	1619	1710	1793	1570	1710	1782
Q Serve(g_s), s	2.4	15.2	15.2	0.2	10.9	11.2	4.4	13.6	13.6	5.4	19.5	19.5
Cycle Q Clear(g_c), s	2.4	15.2	15.2	0.2	10.9	11.2	4.4	13.6	13.6	5.4	19.5	19.5
Prop In Lane	1.00		0.18	1.00		0.76	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	72	477	487	9	410	380	120	599	628	318	645	672
V/C Ratio(X)	0.74	0.78	0.78	0.46	0.66	0.68	0.80	0.62	0.62	0.73	0.77	0.77
Avail Cap(c_a), veh/h	192	858	876	107	768	711	278	971	1018	581	994	1035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	25.2	25.2	37.5	26.0	26.1	34.5	20.4	20.4	33.0	20.7	20.7
Incr Delay (d2), s/veh	10.4	2.8	2.8	26.1	1.8	2.1	8.7	1.3	1.2	2.4	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	5.7	5.8	0.1	4.1	3.9	1.9	4.8	5.0	2.0	6.9	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	28.0	28.0	63.6	27.8	28.3	43.2	21.7	21.6	35.4	23.2	23.1
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		806			534			856			1252	
Approach Delay, s/veh		29.2			28.3			24.1			25.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	27.1	9.6	34.6	7.4	24.2	11.7	32.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	38.0	13.0	44.0	9.0	34.0	14.0	43.0
Max Q Clear Time (g_c+I1), s	2.2	17.2	6.4	21.5	4.4	13.2	7.4	15.6
Green Ext Time (p_c), s	0.0	3.9	0.1	7.1	0.0	2.7	0.3	5.2

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Lane Group	WBT	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	0	1407	2	1030
Future Volume (vph)	0	1407	2	1030
Turn Type	NA	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	24.5	9.6	24.5
Total Split (s)	26.6	83.8	9.6	93.4
Total Split (%)	22.2%	69.8%	8.0%	77.8%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 110.8
Natural Cycle: 120
Control Type: Actuated-Uncoo dinated

Splits and Phases: 1: US-395 & Avenal St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	54	0	5	0	1407	20	2	1030	0
Future Volume (veh/h)	0	0	0	54	0	5	0	1407	20	2	1030	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	0	1800	1800	1700	1800	0
Adj Flow Rate, veh/h				59	0	5	0	1529	22	2	1120	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				129	0	11	0	1346	19	4	1455	0
Arrive On Green				0.08	0.00	0.08	0.00	0.76	0.76	0.00	0.81	0.00
Sat Flow, veh/h				1565	0	133	0	1770	25	1619	1800	0
Grp Volume(v), veh/h				64	0	0	0	0	1551	2	1120	0
Grp Sat Flow(s),veh/h/ln				1698	0	0	0	0	1795	1619	1800	0
Q Serve(g_s), s				3.7	0.0	0.0	0.0	0.0	77.3	0.1	32.0	0.0
Cycle Q Clear(g_c), s				3.7	0.0	0.0	0.0	0.0	77.3	0.1	32.0	0.0
Prop In Lane				0.92		0.08	0.00		0.01	1.00		0.00
Lane Grp Cap(c), veh/h				140	0	0	0	0	1366	4	1455	0
V/C Ratio(X)				0.46	0.00	0.00	0.00	0.00	1.14	0.46	0.77	0.00
Avail Cap(c_a), veh/h				368	0	0	0	0	1366	80	1539	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				44.5	0.0	0.0	0.0	0.0	12.2	50.6	4.9	0.0
Incr Delay (d2), s/veh				2.3	0.0	0.0	0.0	0.0	70.6	25.2	2.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	0.0	0.0	0.0	42.6	0.1	5.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.8	0.0	0.0	0.0	0.0	82.8	75.8	7.2	0.0
LnGrp LOS				D	A	A	A	A	F	E	A	A
Approach Vol, veh/h					64			1551			1122	
Approach Delay, s/veh					46.8			82.8			7.4	
Approach LOS					D			F			A	

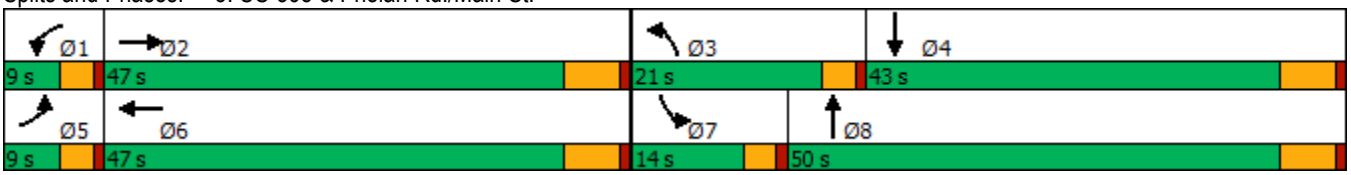
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.9	83.8				88.7		13.0				
Change Period (Y+Rc), s	4.6	6.5				6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3				86.9		22.0				
Max Q Clear Time (g_c+I1), s	2.1	79.3				34.0		5.7				
Green Ext Time (p_c), s	0.0	0.0				11.3		0.2				

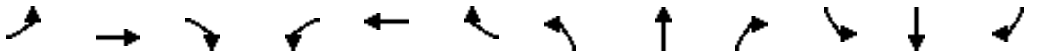
Intersection Summary		
HCM 6th Ctrl Delay		51.0
HCM 6th LOS		D

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	568	9	668	165	1110	235	800
Future Volume (vph)	46	568	9	668	165	1110	235	800
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.0	16.0	9.0	16.0	9.0	16.0	9.0	16.0
Total Split (s)	9.0	47.0	9.0	47.0	21.0	50.0	14.0	43.0
Total Split (%)	7.5%	39.2%	7.5%	39.2%	17.5%	41.7%	11.7%	35.8%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 113.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	568	69	9	668	276	165	1110	26	235	800	51
Future Volume (veh/h)	46	568	69	9	668	276	165	1110	26	235	800	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	48	598	45	9	703	207	174	1168	20	247	842	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	1079	81	18	806	237	201	1299	22	289	1150	53
Arrive On Green	0.04	0.33	0.33	0.01	0.31	0.31	0.12	0.38	0.38	0.09	0.35	0.35
Sat Flow, veh/h	1619	3221	242	1619	2605	767	1619	3440	59	3141	3328	154
Grp Volume(v), veh/h	48	317	326	9	461	449	174	580	608	247	433	448
Grp Sat Flow(s),veh/h/ln	1619	1710	1753	1619	1710	1662	1619	1710	1789	1570	1710	1772
Q Serve(g_s), s	3.2	16.4	16.5	0.6	27.7	27.7	11.4	34.7	34.7	8.4	24.0	24.1
Cycle Q Clear(g_c), s	3.2	16.4	16.5	0.6	27.7	27.7	11.4	34.7	34.7	8.4	24.0	24.1
Prop In Lane	1.00		0.14	1.00		0.46	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	59	573	587	18	529	514	201	646	676	289	591	613
V/C Ratio(X)	0.81	0.55	0.56	0.51	0.87	0.87	0.87	0.90	0.90	0.85	0.73	0.73
Avail Cap(c_a), veh/h	75	646	662	75	646	628	254	693	725	289	591	613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	29.5	29.5	53.4	35.5	35.5	46.6	31.8	31.8	48.5	31.1	31.1
Incr Delay (d2), s/veh	36.4	0.8	0.8	15.7	10.8	11.1	20.4	14.3	13.8	20.8	4.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.4	6.6	0.3	12.2	11.9	5.5	15.5	16.2	4.0	9.9	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.3	30.3	30.3	69.1	46.3	46.6	67.0	46.1	45.6	69.3	35.9	35.8
LnGrp LOS	F	C	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		691			919			1362			1128	
Approach Delay, s/veh		34.3			46.6			48.6			43.2	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	42.4	17.5	43.5	8.0	39.6	14.0	47.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	41.0	17.0	37.0	5.0	41.0	10.0	44.0
Max Q Clear Time (g_c+I1), s	2.6	18.5	13.4	26.1	5.2	29.7	10.4	36.7
Green Ext Time (p_c), s	0.0	3.3	0.1	4.2	0.0	3.9	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	44.3
HCM 6th LOS	D

HORIZON YEAR (2040) WITH PROJECT

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	18	1910	5	2741
Future Volume (vph)	18	1910	5	2741
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	28.5	9.6	24.5
Total Split (s)	27.0	81.0	12.0	93.0
Total Split (%)	22.5%	67.5%	10.0%	77.5%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min
Act Effct Green (s)	12.7	86.1	5.5	87.9
Actuated g/C Ratio	0.13	0.86	0.05	0.87
v/c Ratio	0.10	0.48	0.05	0.66
Control Delay	44.9	5.2	56.2	5.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	44.9	5.2	56.2	5.6
LOS	D	A	E	A
Approach Delay	44.9	5.2		5.7
Approach LOS	D	A		A

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 100.5			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 5.7		Intersection LOS: A	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: US-395 & Avenal St.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	18	1	1910	55	5	2741
Future Volume (veh/h)	18	1	1910	55	5	2741
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1800	1900	1900	1900	1800	1900
Adj Flow Rate, veh/h	20	1	2076	60	5	2979
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	74	4	3964	114	11	4277
Arrive On Green	0.05	0.05	0.76	0.76	0.01	0.82
Sat Flow, veh/h	1553	78	5353	149	1714	5358
Grp Volume(v), veh/h	22	0	1384	752	5	2979
Grp Sat Flow(s),veh/h/ln	1708	0	1729	1873	1714	1729
Q Serve(g_s), s	1.1	0.0	13.6	13.7	0.3	20.5
Cycle Q Clear(g_c), s	1.1	0.0	13.6	13.7	0.3	20.5
Prop In Lane	0.91	0.05		0.08	1.00	
Lane Grp Cap(c), veh/h	81	0	2645	1433	11	4277
V/C Ratio(X)	0.27	0.00	0.52	0.52	0.45	0.70
Avail Cap(c_a), veh/h	441	0	2972	1610	146	5176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	4.0	4.0	42.9	3.1
Incr Delay (d2), s/veh	1.8	0.0	0.2	0.3	10.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	2.0	2.2	0.1	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.6	0.0	4.2	4.3	52.9	3.5
LnGrp LOS	D	A	A	A	D	A
Approach Vol, veh/h	22		2136			2984
Approach Delay, s/veh	41.6		4.2			3.5
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.2	72.8			78.0	8.7
Change Period (Y+Rc), s	4.6	6.5			6.5	4.6
Max Green Setting (Gmax), s	7.4	74.5			86.5	22.4
Max Q Clear Time (g_c+I1), s	2.3	15.7			22.5	3.1
Green Ext Time (p_c), s	0.0	24.1			49.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBL	NBT	SBT	Ø1	Ø8
Lane Configurations							
Traffic Volume (vph)	19	0	325	1946	2648		
Future Volume (vph)	19	0	325	1946	2648		
Turn Type	Perm	NA	Prot	NA	NA		
Protected Phases		4	5	2	6	1	8
Permitted Phases	4						
Detector Phase	4	4	5	2	6		
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	26.6	9.6	24.5	24.5	9.6	26.6
Total Split (s)	26.6	26.6	31.0	83.8	62.4	9.6	26.6
Total Split (%)	22.2%	22.2%	25.8%	69.8%	52.0%	8%	22%
Yellow Time (s)	3.6	3.6	3.6	5.5	5.5	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.6	4.6	4.6	6.5	6.5		
Lead/Lag			Lead	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	None
Act Effct Green (s)	12.2	12.2	25.4	88.1	56.5		
Actuated g/C Ratio	0.11	0.11	0.24	0.83	0.53		
v/c Ratio	0.13	0.18	0.88	0.50	1.12		
Control Delay	45.4	0.9	64.5	4.6	85.5		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	45.4	0.9	64.5	4.6	85.5		
LOS	D	A	E	A	F		
Approach Delay		9.9		13.2	85.5		
Approach LOS		A		B	F		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.4	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 52.0	Intersection LOS: D
Intersection Capacity Utilization 94.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 2: US-395 & Yucca Terrace Dr.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	0	74	0	0	0	325	1946	0	0	2648	111
Future Volume (veh/h)	19	0	74	0	0	0	325	1946	0	0	2648	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	21	0	82	0	0	0	361	2162	0	0	2942	123
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	224	0	146	69	172	0	389	4168	0	2	2723	112
Arrive On Green	0.09	0.00	0.09	0.00	0.00	0.00	0.23	0.80	0.00	0.00	0.53	0.53
Sat Flow, veh/h	1714	0	1610	1337	1900	0	1714	5358	0	1714	5109	211
Grp Volume(v), veh/h	21	0	82	0	0	0	361	2162	0	0	1978	1087
Grp Sat Flow(s),veh/h/ln	1714	0	1610	1337	1900	0	1714	1729	0	1714	1729	1862
Q Serve(g_s), s	1.2	0.0	5.1	0.0	0.0	0.0	21.6	14.7	0.0	0.0	55.9	55.9
Cycle Q Clear(g_c), s	1.2	0.0	5.1	0.0	0.0	0.0	21.6	14.7	0.0	0.0	55.9	55.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.11
Lane Grp Cap(c), veh/h	224	0	146	69	172	0	389	4168	0	2	1843	992
V/C Ratio(X)	0.09	0.00	0.56	0.00	0.00	0.00	0.93	0.52	0.00	0.00	1.07	1.10
Avail Cap(c_a), veh/h	428	0	338	228	398	0	431	4168	0	82	1843	992
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	0.0	45.7	0.0	0.0	0.0	39.7	3.5	0.0	0.0	24.5	24.5
Incr Delay (d2), s/veh	0.2	0.0	3.4	0.0	0.0	0.0	24.0	0.1	0.0	0.0	43.8	58.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	2.2	0.0	0.0	0.0	11.1	2.2	0.0	0.0	30.2	36.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	0.0	49.1	0.0	0.0	0.0	63.7	3.6	0.0	0.0	68.3	82.8
LnGrp LOS	D	A	D	A	A	A	E	A	A	A	F	F
Approach Vol, veh/h		103			0			2523			3065	
Approach Delay, s/veh		48.1			0.0			12.2			73.5	
Approach LOS		D						B			E	

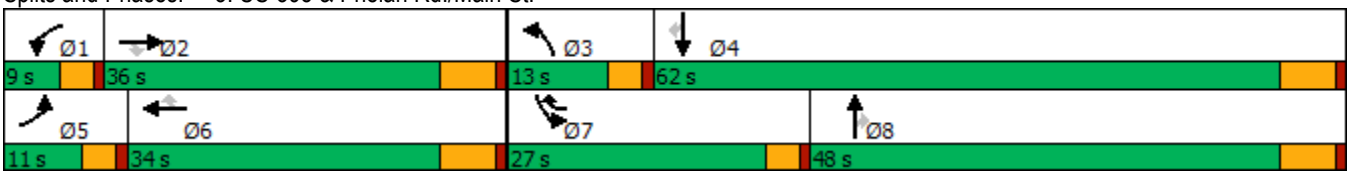
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	90.8		14.1	28.4	62.4		14.1				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	6.5		4.6				
Max Green Setting (Gmax), s	5.0	77.3		22.0	26.4	55.9		22.0				
Max Q Clear Time (g_c+I1), s	0.0	16.7		7.1	23.6	57.9		0.0				
Green Ext Time (p_c), s	0.0	27.2		0.4	0.2	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			45.8
HCM 6th LOS			D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1030	218	23	1203	607	237	1564	26	362	2281	81
Future Volume (vph)	100	1030	218	23	1203	607	237	1564	26	362	2281	81
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.0	16.0	16.0	9.0	16.0	9.0	9.0	16.0	16.0	9.0	16.0	16.0
Total Split (s)	11.0	36.0	36.0	9.0	34.0	27.0	13.0	48.0	48.0	27.0	62.0	62.0
Total Split (%)	9.2%	30.0%	30.0%	7.5%	28.3%	22.5%	10.8%	40.0%	40.0%	22.5%	51.7%	51.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1030	218	23	1203	607	237	1564	26	362	2281	81
Future Volume (veh/h)	100	1030	218	23	1203	607	237	1564	26	362	2281	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	104	1073	171	24	1253	424	247	1629	18	377	2376	63
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	1394	433	42	1210	580	263	2151	668	446	2421	751
Arrive On Green	0.06	0.27	0.27	0.02	0.23	0.23	0.08	0.41	0.41	0.13	0.47	0.47
Sat Flow, veh/h	1810	5187	1610	1810	5187	1610	3510	5187	1610	3510	5187	1610
Grp Volume(v), veh/h	104	1073	171	24	1253	424	247	1629	18	377	2376	63
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1610	1755	1729	1610	1755	1729	1610
Q Serve(g_s), s	6.9	22.9	10.4	1.6	28.0	27.4	8.4	32.2	0.8	12.6	54.1	2.6
Cycle Q Clear(g_c), s	6.9	22.9	10.4	1.6	28.0	27.4	8.4	32.2	0.8	12.6	54.1	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	1394	433	42	1210	580	263	2151	668	446	2421	751
V/C Ratio(X)	0.99	0.77	0.40	0.58	1.04	0.73	0.94	0.76	0.03	0.85	0.98	0.08
Avail Cap(c_a), veh/h	106	1394	433	75	1210	580	263	2151	668	673	2421	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	40.5	35.9	58.0	46.0	33.3	55.2	30.0	20.8	51.2	31.5	17.8
Incr Delay (d2), s/veh	82.6	2.7	0.6	9.1	35.4	4.7	38.8	1.7	0.0	5.4	14.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	9.5	4.0	0.8	15.3	10.7	5.0	12.6	0.3	5.6	23.3	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	139.1	43.1	36.5	67.1	81.4	38.0	94.0	31.6	20.8	56.6	45.7	17.8
LnGrp LOS	F	D	D	E	F	D	F	C	C	E	D	B
Approach Vol, veh/h		1348			1701			1894			2816	
Approach Delay, s/veh		49.7			70.4			39.7			46.5	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	38.2	13.0	62.0	11.0	34.0	19.2	55.8
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	30.0	9.0	56.0	7.0	28.0	23.0	42.0
Max Q Clear Time (g_c+I1), s	3.6	24.9	10.4	56.1	8.9	30.0	14.6	34.2
Green Ext Time (p_c), s	0.0	3.0	0.0	0.0	0.0	0.0	0.6	5.9

Intersection Summary	
HCM 6th Ctrl Delay	50.6
HCM 6th LOS	D

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	54	2887	2	1955
Future Volume (vph)	54	2887	2	1955
Turn Type	Prot	NA	Prot	NA
Protected Phases	3	2	1	6
Permitted Phases				
Detector Phase	3	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	24.5	9.6	24.5
Total Split (s)	17.8	92.4	9.8	102.2
Total Split (%)	14.8%	77.0%	8.2%	85.2%
Yellow Time (s)	3.6	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min
Act Effct Green (s)	9.5	92.1	5.2	93.9
Actuated g/C Ratio	0.09	0.84	0.05	0.85
v/c Ratio	0.43	0.73	0.02	0.48
Control Delay	58.4	7.5	56.0	3.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	58.4	7.5	56.0	3.3
LOS	E	A	E	A
Approach Delay	58.4	7.5		3.4
Approach LOS	E	A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 109.9	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 6.4	Intersection LOS: A
Intersection Capacity Utilization 69.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: US-395 & Avenal St.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	54	5	2887	20	2	1955
Future Volume (veh/h)	54	5	2887	20	2	1955
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1800	1900	1900	1900	1800	1900
Adj Flow Rate, veh/h	59	5	3138	22	2	2125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	75	6	4173	29	5	4335
Arrive On Green	0.05	0.05	0.79	0.79	0.00	0.84
Sat Flow, veh/h	1542	131	5485	37	1714	5358
Grp Volume(v), veh/h	65	0	2039	1121	2	2125
Grp Sat Flow(s),veh/h/ln	1699	0	1729	1893	1714	1729
Q Serve(g_s), s	3.6	0.0	29.7	30.0	0.1	11.0
Cycle Q Clear(g_c), s	3.6	0.0	29.7	30.0	0.1	11.0
Prop In Lane	0.91	0.08		0.02	1.00	
Lane Grp Cap(c), veh/h	83	0	2715	1487	5	4335
V/C Ratio(X)	0.78	0.00	0.75	0.75	0.43	0.49
Avail Cap(c_a), veh/h	233	0	3087	1690	93	5159
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	0.0	5.4	5.4	47.9	2.2
Incr Delay (d2), s/veh	14.7	0.0	0.9	1.7	21.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	4.7	5.5	0.1	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	60.0	0.0	6.3	7.2	69.7	2.3
LnGrp LOS	E	A	A	A	E	A
Approach Vol, veh/h	65		3160			2127
Approach Delay, s/veh	60.0		6.6			2.3
Approach LOS	E		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.9	82.1			86.9	9.3
Change Period (Y+Rc), s	4.6	6.5			6.5	4.6
Max Green Setting (Gmax), s	5.2	85.9			95.7	13.2
Max Q Clear Time (g_c+I1), s	2.1	32.0			13.0	5.6
Green Ext Time (p_c), s	0.0	43.6			28.9	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

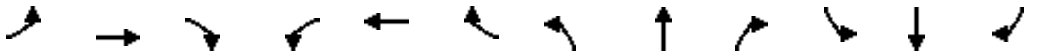
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBL	NBT	SBT	Ø1	Ø8
Lane Configurations							
Traffic Volume (vph)	111	0	74	2797	1980		
Future Volume (vph)	111	0	74	2797	1980		
Turn Type	Perm	NA	Prot	NA	NA		
Protected Phases		4	5	2	6	1	8
Permitted Phases	4						
Detector Phase	4	4	5	2	6		
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.6	26.6	9.6	24.5	24.5	9.6	26.6
Total Split (s)	33.0	33.0	17.1	77.3	69.9	9.7	33.0
Total Split (%)	27.5%	27.5%	14.3%	64.4%	58.3%	8%	28%
Yellow Time (s)	3.6	3.6	3.6	5.5	5.5	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.6	4.6	4.6	6.5	6.5		
Lead/Lag			Lead	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	None
Act Effct Green (s)	26.2	26.2	9.1	74.5	62.9		
Actuated g/C Ratio	0.23	0.23	0.08	0.67	0.56		
v/c Ratio	0.36	0.91	0.55	0.84	0.72		
Control Delay	40.4	54.9	65.7	17.5	21.2		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	40.4	54.9	65.7	17.5	21.2		
LOS	D	D	E	B	C		
Approach Delay		51.8		18.8	21.2		
Approach LOS		D		B	C		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 2: US-395 & Yucca Terrace Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	0	415	0	0	0	74	2797	0	0	1980	29
Future Volume (veh/h)	111	0	415	0	0	0	74	2797	0	0	1980	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	116	0	432	0	0	0	77	2914	0	0	2062	30
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	515	0	421	66	497	0	97	3300	0	2	2828	41
Arrive On Green	0.26	0.00	0.26	0.00	0.00	0.00	0.06	0.64	0.00	0.00	0.54	0.54
Sat Flow, veh/h	1714	0	1610	971	1900	0	1714	5358	0	1714	5268	77
Grp Volume(v), veh/h	116	0	432	0	0	0	77	2914	0	0	1353	739
Grp Sat Flow(s),veh/h/ln	1714	0	1610	971	1900	0	1714	1729	0	1714	1729	1886
Q Serve(g_s), s	5.8	0.0	28.4	0.0	0.0	0.0	4.8	50.6	0.0	0.0	32.3	32.4
Cycle Q Clear(g_c), s	5.8	0.0	28.4	0.0	0.0	0.0	4.8	50.6	0.0	0.0	32.3	32.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.04
Lane Grp Cap(c), veh/h	515	0	421	66	497	0	97	3300	0	2	1857	1013
V/C Ratio(X)	0.23	0.00	1.03	0.00	0.00	0.00	0.79	0.88	0.00	0.00	0.73	0.73
Avail Cap(c_a), veh/h	515	0	421	66	497	0	197	3382	0	81	2019	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	40.1	0.0	0.0	0.0	50.6	16.4	0.0	0.0	19.1	19.1
Incr Delay (d2), s/veh	0.2	0.0	50.6	0.0	0.0	0.0	5.3	3.0	0.0	0.0	1.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	17.1	0.0	0.0	0.0	2.1	16.3	0.0	0.0	11.4	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	0.0	90.7	0.0	0.0	0.0	55.8	19.4	0.0	0.0	20.4	21.4
LnGrp LOS	C	A	F	A	A	A	E	B	A	A	C	C
Approach Vol, veh/h		548			0			2991			2092	
Approach Delay, s/veh		78.2			0.0			20.4			20.7	
Approach LOS		E						C			C	

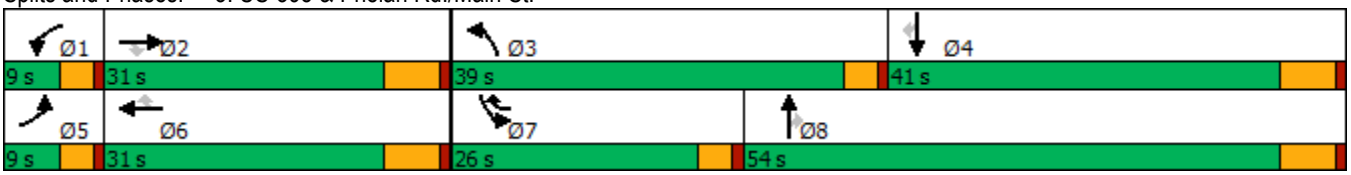
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	75.6		33.0	10.8	64.8		33.0				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	6.5		4.6				
Max Green Setting (Gmax), s	5.1	70.8		28.4	12.5	63.4		28.4				
Max Q Clear Time (g_c+I1), s	0.0	52.6		30.4	6.8	34.4		0.0				
Green Ext Time (p_c), s	0.0	16.4		0.0	0.0	16.8		0.0				

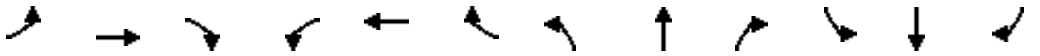
Intersection Summary												
HCM 6th Ctrl Delay			26.1									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	1399	210	27	1077	388	296	2385	423	665	1628	106
Future Volume (vph)	97	1399	210	27	1077	388	296	2385	423	665	1628	106
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.0	16.0	16.0	9.0	16.0	9.0	9.0	16.0	16.0	9.0	16.0	16.0
Total Split (s)	9.0	31.0	31.0	9.0	31.0	26.0	39.0	54.0	54.0	26.0	41.0	41.0
Total Split (%)	7.5%	25.8%	25.8%	7.5%	25.8%	21.7%	32.5%	45.0%	45.0%	21.7%	34.2%	34.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	-2.0	0.0	-0.5	-2.0	0.0
Total Lost Time (s)	4.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0	6.0	3.5	4.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US-395 & Phelan Rd./Main St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1399	210	27	1077	388	296	2385	423	665	1628	106
Future Volume (veh/h)	97	1399	210	27	1077	388	296	2385	423	665	1628	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	1473	221	28	1134	408	312	2511	392	700	1714	86
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	1376	357	46	1282	631	385	2375	644	679	2814	768
Arrive On Green	0.06	0.36	0.34	0.04	0.34	0.31	0.16	0.63	0.60	0.28	0.74	0.72
Sat Flow, veh/h	1810	5700	1589	1810	5700	1610	3619	5700	1610	3619	5700	1610
Grp Volume(v), veh/h	102	1473	221	28	1134	408	312	2511	392	700	1714	86
Grp Sat Flow(s),veh/h/ln	1810	1900	1589	1810	1900	1610	1810	1900	1610	1810	1900	1610
Q Serve(g_s), s	5.0	29.0	14.0	1.8	22.5	25.0	10.0	50.0	18.4	22.5	17.1	2.0
Cycle Q Clear(g_c), s	5.0	29.0	14.0	1.8	22.5	25.0	10.0	50.0	18.4	22.5	17.1	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	1376	357	46	1283	631	385	2375	644	679	2814	768
V/C Ratio(X)	1.35	1.07	0.62	0.61	0.88	0.65	0.81	1.06	0.61	1.03	0.61	0.11
Avail Cap(c_a), veh/h	75	1376	357	75	1283	631	1056	2375	644	679	2814	768
HCM Platoon Ratio	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	38.3	35.5	57.1	38.3	26.1	49.3	22.5	18.1	43.1	10.1	9.2
Incr Delay (d2), s/veh	223.7	45.6	3.2	9.4	7.6	2.3	3.1	35.8	1.8	42.9	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	16.8	5.0	0.9	9.6	8.0	4.3	21.6	5.3	12.5	4.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	280.0	83.9	38.7	66.6	45.9	28.4	52.4	58.3	19.9	86.0	10.5	9.3
LnGrp LOS	F	F	D	E	D	C	D	F	B	F	B	A
Approach Vol, veh/h		1796			1570			3215			2500	
Approach Delay, s/veh		89.4			41.7			53.1			31.6	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	33.0	16.8	63.2	9.0	31.0	26.0	54.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	25.0	35.0	35.0	5.0	25.0	22.0	48.0
Max Q Clear Time (g_c+I1), s	3.8	31.0	12.0	19.1	7.0	27.0	24.5	52.0
Green Ext Time (p_c), s	0.0	0.0	0.8	11.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.4
HCM 6th LOS	D